STEREO AMPLIFIER

SA-6500II

KC, HG, S

<ART-217-0>

Additional

Service Manual

PIONEER®

MODEL SA-6500II COMES IN FOUR VERSIONS DISTINGUISHED AS FOLLOWS:

Type	Voltage	Remarks
KC	120V	CSA (Canada) approved.
KU	120V	UL (U.S.A.) approved.
HG	220V and 240V (Switchable)	SEMKO (Sweden), NEMKO (Norway), DEMKO (Denmark) and EI (Finland) approved.
S	110V, 120V, 220V and 240V (Switchable)	General export mode.

- This additional service manual is applicable to the S, HG and KC types.
- This additional service manual provides only part that differ from KU type.
  For servicing or ordering parts of the SA-6500II HG, S and KC types please refer to the SA-6500II KU type <ART-215> previously issued.

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1. SPECIFICATIONS

- The specifications for S, HG and KC types are the same as KU type except the following section.

Power Requirements .....

HG	220/240V	50/60Hz (switchable)
S	110/120/220/240V	50/60Hz (switchable)
KC	120V 60Hz	
KU	120V 60Hz	

Power Consumption .....

HG	300W
S	300W
KC	220VA
KU	100W, 300W (Max.)

Input (Sensitivity/Impedance) .....

HG	TAPE PLAY 1, 2	150mV/50k ohms
	TAPE PLAY 2 (DIN connector)	150mV/50k ohms
S	TAPE PLAY 1, 2	150mV/50k ohms
	TAPE PLAY 2 (DIN connector)	150mV/50k ohms
KC	TAPE PLAY 1, 2	150mV/50k ohms
	Without DIN connector	.....
KU	TAPE PLAY 1, 2	150mV/50k ohms
	Without DIN connector	.....

Output (Level/Impedance) .....

HG	TAPE REC 1, 2	150mV
	TAPE REC 2 (DIN connector)	30mV/80k ohms
S	TAPE REC 1, 2	150mV
	TAPE REC 2 (DIN connector)	30mV/80k ohms
KC	TAPE REC 1, 2	150mV
	Without DIN connector	.....
KU	TAPE REC 1, 2	150mV
	Without DIN connector	.....

2. CONTRAST OF MISCELLANEOUS PARTS

NOTE:
- *Capacitors; in μF unless otherwise noted p:pF*
- *Resistors; in Ω, ¼W unless otherwise noted kΩ, M:MΩ*

FUSES AND LAMP

Symbol	Description	Part No.			
		KU-type	KC-type	HG-type	S-type
FU1	Fuse	AEK-100 (4A)	AEK-100 (4A)	AEK-405 (1.6A)	AEK-103 (2A)
FU2	Fuse	AEK-106 (1A)	AEK-106 (1A)	AEK-402 (1A)	AEK-106 (1A)
FU3	Fuse	AEK-108 (5A)	AEK-108 (5A)	AEK-400 (4A)	AEK-108 (5A)
FU4	Fuse	AEK-108 (5A)	AEK-108 (5A)	AEK-400 (4A)	AEK-108 (5A)
PL1	Pilot lamp with lead wire	AEL-047	AEL-047	AEL-062	AEL-062

SWITCHES

Symbol	Description	Part No.			
		KU-type	KC-type	HG-type	S-type
S7	Lever switch (POWER)	ASK-065	ASK-065	ASK-096	ASK-065
S8	Line voltage selector	.....	.....	AKX-037 (2 position)	AKR-031 (4 position)

TRANSFORMER

Symbol	Description	Part No.			
		KU-type	KC-type	HG-type	S-type
T1	Power transformer	ATT-398	ATT-399	ATT-360	ATT-361

OTHERS

Symbol	Description	Part No.			
		KU-type	KC-type	HG-type	S-type
	AF amplifier assembly	AWK-083	AWK-083	AWK-084	AWK-085
	AC power cord	ADG-005	ADG-005	.....	ADG-016
	AC socket (OUTLETS)	AKP-004	AKP-004	.....	AKP-004
	Recessed plug (AC INLET)	.....	.....	AKP-008	.....
	Strain relief	AEC-079	AEC-079	.....	AEC-079
	Capacitor cover	AEC-279 (large)	AEC-365 (small)	AEC-099 (small)	AEC-099 (small)
	5P DIN connector socket (REC/PLAY)	.....	.....	K93-003	K93-003

Symbol	Description	Part No.			
		KU-type	KC-type	HG-type	S-type
	Fuse clip	AKR-030	AKR-013	AKR-010	AKR-013
	Packing case	AHD-460	AHD-464	AHD-462	AHD-460
	Terminal 2P	.....	.....	AKC-023	.....
	Screw	ABA-003	.....	.....	.....

CAPACITORS

Symbol	Description		Part No.			
			KU-type	KC-type	HG-type	S-type
C1	Ceramic		ACG-003 (0.01 125V)	ACG-014 (0.01 125V)	.....	ACG-001 (0.01 250V)
C2	Ceramic		ACG-003 (0.01 125V)	ACG-014 (0.01 125V)	ACG-001 (0.01 250V)	ACG-001 (0.01 250V)
C5	Ceramic	0.047 50V	CKDYF 473Z 50	CKDYF 473Z 50	.....	CKDYF 473Z 50
C7	Ceramic	0.047 50V	.....	.....	CKDYF 473Z 50	.....

FURNISHED PARTS

Symbol	Description	Part No.			
		KU-type	KC-type	HG-type	S-type
	Operating instructions	ARB-226	ARB-226	ARB-228	ARB-228
	Operating instructions (Germany/French)	.....	.....	ARD-110	.....
	Fuse 4A (for 110V or 120V)	.....	.....	.....	AEK-100
	Fuse 2A (for 220V or 240V)	.....	.....	.....	AEK-103
	Vinyl bag (for fuse)	.....	.....	.....	E11-033
	Vinyl bag (for amplifier)	AHG-023	AHG-023	.....	AHG-023

3. SCHEMATIC DIAGRAM, P.C. BOARD PATTERN AND PARTS LIST OF SA-6500II/HG

3.1 MISCELLANEOUS PARTS LIST

NOTE:
- *Capacitors: in μF unless otherwise noted p:pF*
- *Resistors: in Ω, ¼W unless otherwise noted k:kΩ, M:MΩ*

SWITCHES

Symbol	Description	Part No.
S1	Rotary switch (FUNCTION)	ASB-050
S6	Rotary switch (SPEAKERS)	ASB-021
S7	Lever switch (POWER)	ASK-096
S8	Line voltage selector (Switchable 2 position)	AKX-037

TRANSFORMER

Symbol	Description	Part No.
T1	Power transformer	ATT-360

POTENTIOMETERS

Symbol	Description	Part No.
VR2	Variable resistor (VOLUME) 100k-A	ACV-154
VR3	Variable resistor (TREBLE) 100k-A	ACV-143
VR4	Variable resistor (BASS) 100k-A	ACV-143

CAPACITORS

Symbol	Description			Part No.
C2	Ceramic	0.01	250V	ACG-001
C3	Ceramic	0.047	50V	CKDYF 473Z 50
C4	Ceramic	0.047	50V	CKDYF 473Z 50
C6	Ceramic	0.047	50V	CKDYF 473Z 50
C7	Ceramic	0.047	50V	CKDYF 473Z 50

LAMP AND FUSES

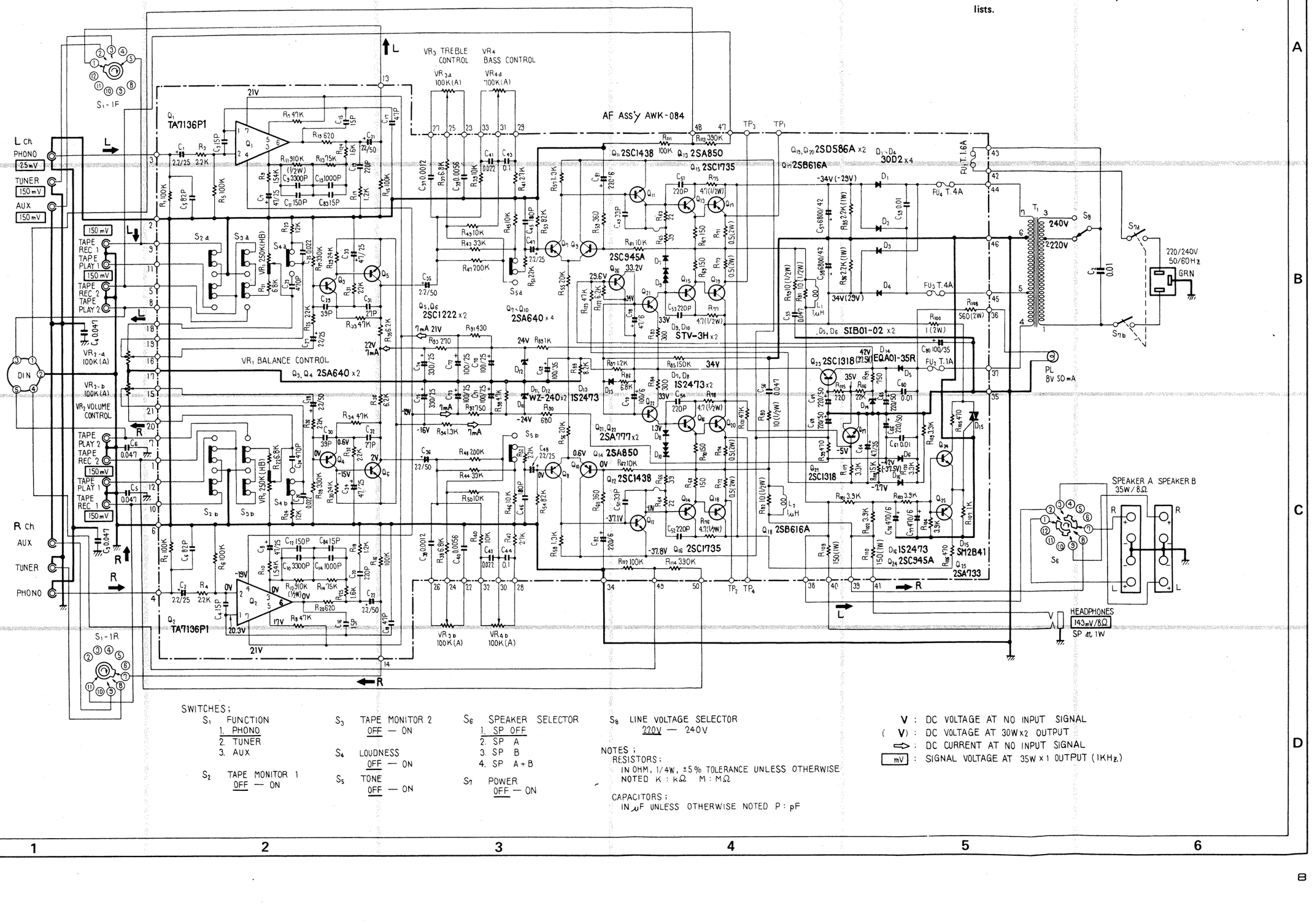
Symbol	Description		Part No.
PL1	Lamp with wire		AEL-062
FU1	Fuse	1.6A	AEK-405
FU2	Fuse	1A	AEK-402
FU3	Fuse	4A	AEK-400
FU4	Fuse	4A	AEK-400

List of Changed Parts for Factory Modification

Symbol	Description	Part No.

3.2 SCHEMATIC DIAGRAM

NOTE:
The indicated semiconductors are representative ones only. Other alternative semiconductors may be used and are listed in the parts lists.



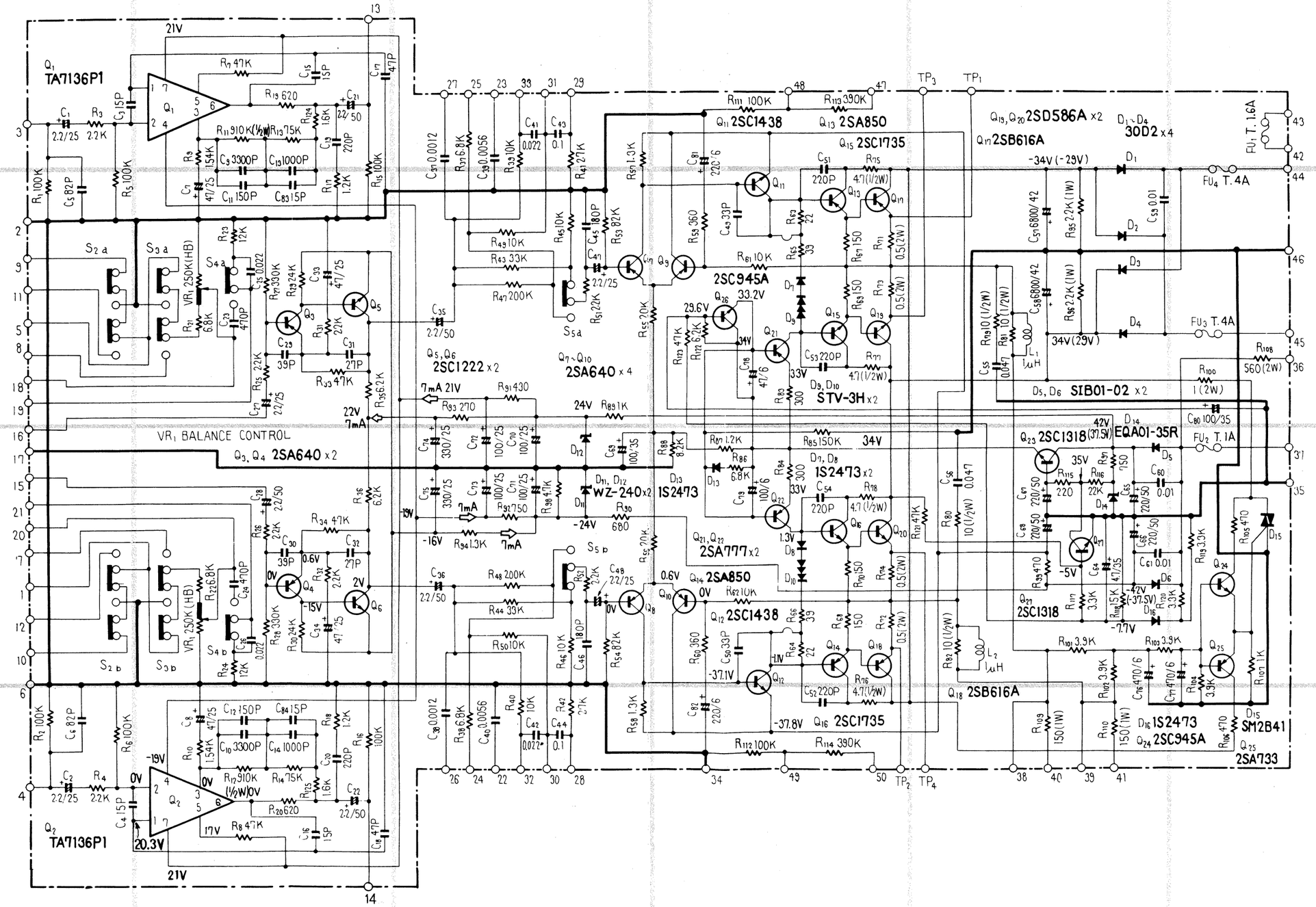
SWITCHES;

- S_1 FUNCTION: 1. PHONO, 2. TUNER, 3. AUX
- S_2 TAPE MONITOR 1: OFF — ON
- S_3 TAPE MONITOR 2: OFF — ON
- S_4 LOUDNESS: OFF — ON
- S_5 TONE: OFF — ON
- S_6 SPEAKER SELECTOR: 1. SP OFF, 2. SP A, 3. SP B, 4. SP A+B
- S_7 POWER: OFF — ON
- S_8 LINE VOLTAGE SELECTOR: 220V — 240V

NOTES;
RESISTORS: IN OHM, 1/4W, ±5% TOLERANCE UNLESS OTHERWISE NOTED K : kΩ M : MΩ
CAPACITORS; IN μF UNLESS OTHERWISE NOTED P : pF

V : DC VOLTAGE AT NO INPUT SIGNAL
(V) : DC VOLTAGE AT 30W x2 OUTPUT
⇨ : DC CURRENT AT NO INPUT SIGNAL
[mV] : SIGNAL VOLTAGE AT 35W x1 OUTPUT (1KHz)

3.3 AF AMPLIFIER ASSEMBLY (AWK-084)



Foil side

PHONO

TUNER

R ch AUX C_4 0.047

C_3 0.047

AUX 150mV

TUNER 150mV

L ch PHONO 2.5mV

S_1 -IR

S_1 -IF

DIN

HEADPHONES

SPEAKER A
SPEAKER B
35W/8Ω

T_{13} 240V 220V

S_8

S_{7a} S_{7b}

C_2 0.01

220/240V 50/60Hz

GRN

PL 8V 50mA

TAPE MONITOR 2

TAPE MONITOR 1

R ch L ch R ch L ch

TAPE REC 1 | TAPE PLAY 1 | TAPE REC 2 | TAPE PLAY 2 | TAPE REC 2 | TAPE PLAY 2 | TAPE PLAY 1 | TAPE REC 1

VR_{2-a} 100k(A)

VR_{2-b} 100k(A)

VR_2 VOLUME CONTROL

BALANCE CONTROL

LOUDNESS

TONE

VR_{3a} 100k(A)

VR_{3b} 100k(A)

VR_3 TREBLE CONTROL

VR_{4b} 100k(A)

VR_{4a} 100k(A)

VR_4 BASS CONTROL

Parts List of AF Amplifier Assembly (AWK-084)

SWITCHES

Symbol	Description	Part No.
S2	Lever switch (TAPE MONITOR 1)	ASK-092
S3	Lever switch (TAPE MONITOR 2)	ASK-092
S4	Lever switch (LOUDNESS)	ASK-089
S5	Lever switch (TONE)	ASK-089

COILS

Symbol	Description	Part No.
L1	Choke coil	ATH-011
L2	Choke coil	ATH-011

CAPACITORS

Symbol	Description			Part No.
C1	Electrolytic	2.2	25V	CSZA 2R2M 25
C2	Electrolytic	2.2	25V	CSZA 2R2M 25
C3	Ceramic	15p	50V	CCDSL 150K 50
C4	Ceramic	15p	50V	CCDSL 150K 50
C5	Ceramic	82p	50V	CCDSL 820K 50
C6	Ceramic	82p	50V	CCDSL 820K 50
C7	Electrolytic	47	25V	CEANL 470P 25
C8	Electrolytic	47	25V	CEANL 470P 25
C9	Polystyrene	3300p	50V	CQSA 332G 50
C10	Polystyrene	3300p	50V	CQSA 332G 50
C11	Ceramic	150p	50V	CCDSL 151K 50
C12	Ceramic	150p	50V	CCDSL 151K 50
C13	Polystyrene	1000p	50V	CQSA 102G 50
C14	Polystyrene	1000p	50V	CQSA 102G 50
C15	Ceramic	15p	50V	CCDSL 150K 50
C16	Ceramic	15p	50V	CCDSL 150K 50
C17	Ceramic	47p	50V	CCDSL 470K 50
C18	Ceramic	47p	50V	CCDSL 470K 50
C19	Ceramic	220p	50V	CCDSL 221K 50
C20	Ceramic	220p	50V	CCDSL 221K 50
C21	Electrolytic	2.2	50V	CEANL 2R2P 50
C22	Electrolytic	2.2	50V	CEANL 2R2P 50
C23	Ceramic	470p	50V	CKDYB 471K 50
C24	Ceramic	470p	50V	CKDYB 471K 50
C25	Ceramic	0.022	50V	CKDYF 223Z 50
C26	Ceramic	0.022	50V	CKDYF 223Z 50
C27	Electrolytic	2.2	25V	CSZA 2R2M 25
C28	Electrolytic	2.2	25V	CSZA 2R2M 25
C29	Ceramic	39p	50V	CCDSL 390K 50
C30	Ceramic	39p	50V	CCDSL 390K 50
C31	Ceramic	27p	50V	CCDSL 270K 50
C32	Ceramic	27p	50V	CCDSL 270K 50
C33	Electrolytic	47	25V	CEANL 470P 25
C34	Electrolytic	47	25V	CEANL 470P 25
C35	Electrolytic	2.2	50V	CEANL 2R2P 50

Symbol	Description			Part No.
C36	Electrolytic	2.2	50V	CEANL 2R2P 50
C37	Ceramic	1200p	50V	CKDYB 122K 50
C38	Ceramic	1200p	50V	CKDYB 122K 50
C39	Ceramic	5600p	50V	CKDYB 562K 50
C40	Ceramic	5600p	50V	CKDYB 562K 50
C41	Mylar	0.022	50V	CQMA 223K 50
C42	Mylar	0.022	50V	CQMA 223K 50
C43	Mylar	0.1	50V	CQMA 104K 50
C44	Mylar	0.1	50V	CQMA 104K 50
C45	Ceramic	180p	50V	CCDSL 181K 50
C46	Ceramic	180p	50V	CCDSL 181K 50
C47	Electrolytic	2.2	25V	CSZA 2R2M 25
C48	Electrolytic	2.2	25V	CSZA 2R2M 25
C49	Ceramic	33p	500V	CCDSL 330K 500
C50	Ceramic	33p	500V	CCDSL 330K 500
C51	Ceramic	220p	500V	CCDSL 221K 500
C52	Ceramic	220p	500V	CCDSL 221K 500
C53	Ceramic	220p	500V	CCDSL 221K 500
C54	Ceramic	220p	500V	CCDSL 221K 500
C55	Ceramic	0.047	50V	CKDYF 473Z 50
C56	Ceramic	0.047	50V	CKDYF 473Z 50
C57	Electrolytic	6800	42V	ACH-073
C58	Electrolytic	6800	42V	ACH-073
C59	Ceramic	0.01	150V	ACG-004
C60	Ceramic	0.01	150V	ACG-004
C61	Ceramic	0.01	150V	ACG-004
C62				
C63				
C64	Electrolytic	4.7	35V	CEA 4R7P 35
C65	Electrolytic	220	50V	CEA 221P 50
C66	Electrolytic	220	50V	CEA 221P 50
C67	Electrolytic	220	35V	ACH-325
C68	Electrolytic	220	50V	CEA 221P 50
C69	Electrolytic	100	35V	CEA 101P 35
C70	Electrolytic	100	25V	CEA 101P 25
C71	Electrolytic	100	25V	CEA 101P 25
C72	Electrolytic	100	25V	CEA 101P 25
C73	Electrolytic	100	25V	CEA 101P 25
C74	Electrolytic	330	25V	CEA 331P 25
C75	Electrolytic	330	25V	CEA 331P 25
C76	Electrolytic	470	6V	CEA 471P 6
C77	Electrolytic	470	6V	CEA 471P 6
C78	Electrolytic	47	6V	CEA 470P 6
C79	Electrolytic	100	6V	CEA 101P 6
C80	Electrolytic	100	35V	CEA 101P 35
C81	Electrolytic	220	6V	CEA 221P 6
C82	Electrolytic	220	6V	CEA 221P 6
C83	Ceramic	15p	50V	CCDSL 150K 50
C84	Ceramic	15p	50V	CCDSL 150K 50

RESISTORS

Symbol	Description			Part No.
R1	Carbon film	100k		RD¼PS 104JNL
R2	Carbon film	100k		RD¼PS 104JNL
R3	Carbon film	2.2k		RD¼PS 222J
R4	Carbon film	2.2k		RD¼PS 222J
R5	Carbon film	100k		RD¼PS 104JNL
R6	Carbon film	100k		RD¼PS 104JNL
R7	Carbon film	47k		RD¼PS 473J
R8	Carbon film	47k		RD¼PS 473J
R9	Metal film	1.54k		RN¼PT 1541F
R10	Metal film	1.54k		RN¼PT 1541F
R11	Metal film	910k	½W	RN½PT 9103F
R12	Metal film	910k	½W	RN½PT 9103F
R13	Metal film	75k		RN¼PT 7502F
R14	Metal film	75k		RN¼PT 7502F
R15	Carbon film	100k		RD¼PS 104J
R16	Carbon film	100k		RD¼PS 104J
R17	Carbon film	1.2k		RD¼PS 122J
R18	Carbon film	1.2k		RD¼PS 122J
R19	Carbon film	620		RD¼PS 621J
R20	Carbon film	620		RD¼PS 621J
R21	Carbon film	6.8k		RD¼PS 682J
R22	Carbon film	6.8k		RD¼PS 682J
R23	Carbon film	12k		RD¼PS 123J
R24	Carbon film	12k		RD¼PS 123J
R25	Carbon film	2.2k		RD¼PS 222J
R26	Carbon film	2.2k		RD¼PS 222J
R27	Carbon film	330k		RD¼PS 334JNL
R28	Carbon film	330k		RD¼PS 334JNL
R29	Carbon film	24k		RD¼PS 243J
R30	Carbon film	24k		RD¼PS 243J
R31	Carbon film	2.2k		RD¼PS 222J
R32	Carbon film	2.2k		RD¼PS 222J
R33	Carbon film	47k		RD¼PS 473JNL
R34	Carbon film	47k		RD¼PS 473JNL
R35	Carbon film	6.2k		RD¼PS 622J
R36	Carbon film	6.2k		RD¼PS 622J
R37	Carbon film	6.8k		RD¼PS 682J
R38	Carbon film	6.8k		RD¼PS 682J
R39	Carbon film	10k		RD¼PS 103J
R40	Carbon film	10k		RD¼PS 103J
R41	Carbon film	2.7k		RD¼PS 272J
R42	Carbon film	2.7k		RD¼PS 272J
R43	Carbon film	33k		RD¼PS 333J
R44	Carbon film	33k		RD¼PS 333J
R45	Carbon film	10k		RD¼PS 103J
R46	Carbon film	10k		RD¼PS 103J
R47	Carbon film	200k		RD¼PS 204J
R48	Carbon film	200k		RD¼PS 204J
R49	Carbon film	10k		RD¼PS 103J
R50	Carbon film	10k		RD¼PS 103J

Symbol	Description			Part No.
R51	Carbon film	2.2k		RD¼PS 222J
R52	Carbon film	2.2k		RD¼PS 222J
R53	Carbon film	82k		RD¼PS 823JNL
R54	Carbon film	82k		RD¼PS 823JNL
R55	Carbon film	20k		RD¼PS 203J
R56	Carbon film	20k		RD¼PS 203J
R57	Carbon film	1.3k		RD¼PS 132J
R58	Carbon film	1.3k		RD¼PS 132J
R59	Carbon film	360		RD¼PS 361J
R60	Carbon film	360		RD¼PS 361J
R61	Carbon film	10k		RD¼PS 103J
R62	Carbon film	10k		RD¼PS 103J
R63	Carbon film	22		RD¼PS 220J
R64	Carbon film	22		RD¼PS 220J
R65	Carbon film	39		RD¼PS 390J
R66	Carbon film	39		RD¼PS 390J
R67	Carbon film	150		RD¼PSF 151J
R68	Carbon film	150		RD¼PSF 151J
R69	Carbon film	150		RD¼PSF 151J
R70	Carbon film	150		RD¼PSF 151J
R71	Metal film	0.5	2W	RN2H 0R5K
R72	Metal film	0.5	2W	RN2H 0R5K
R73	Metal film	0.5	2W	RN2H 0R5K
R74	Metal film	0.5	2W	RN2H 0R5K
R75	Carbon film	4.7	½W	RD½PSF 4R7J
R76	Carbon film	4.7	½W	RD½PSF 4R7J
R77	Carbon film	4.7	½W	RD½PSF 4R7J
R78	Carbon film	4.7	½W	RD½PSF 4R7J
R79	Carbon film	10	½W	RD½PSF 100J
R80	Carbon film	10	½W	RD½PSF 100J
R81	Carbon film	10	½W	RD½PSF 100J
R82	Carbon film	10	½W	RD½PSF 100J
R83	Carbon film	300		RD¼PS 301J
R84	Carbon film	300		RD¼PS 301J
R85	Carbon film	150k		RD¼PS 154J
R86	Carbon film	6.8k		RD¼PS 682J
R87	Carbon film	1.2k		RD¼PS 122J
R88	Carbon film	8.2k		RD¼PS 822J
R89	Carbon film	1k		RD¼PSF 102J
R90	Carbon film	680		RD¼PSF 681J
R91	Carbon film	430		RD¼PS 431J
R92	Carbon film	750		RD¼PS 751J
R93	Carbon film	270		RD¼PS 271J
R94	Carbon film	1.3k		RD¼PS 132J
R95	Metal oxide film	2.2k	1W	RS1P 222J
R96	Metal oxide film	2.2k	1W	RS1P 222J
R97	Carbon film	750		RD¼PS 751J
R98	Carbon film	4.7k		RD¼PS 472J
R99	Carbon film	470		RD¼PSF 471J
R100	Metal film	1	2W	RN2H 010K

Symbol	Description	Part No.
R101	Carbon film 3.9k	RD¼PS 392J
R102	Carbon film 3.9k	RD¼PS 392J
R103	Carbon film 3.9k	RD¼PS 392J
R104	Carbon film 3.9k	RD¼PS 392J
R105	Carbon film 470	RD¼PS 471J
R106	Carbon film 470	RD¼PS 471J
R107	Carbon film 1k	RD¼PS 102J
R108	Metal oxide film 560 2W	RS2P 561J
R109	Metal oxide film 150 1W	RS1P 151J
R110	Metal oxide film 150 1W	RS1P 151J
R111	Carbon film 100k	RD¼PS 104J
R112	Carbon film 100k	RD¼PS 104J
R113	Carbon film 390k	RD¼PS 394J
R114	Carbon film 390k	RD¼PS 394J
R115	Carbon film 220	RD¼PS 221J
R116	Carbon film 22k	RD¼PS 223J
R117	Carbon film 3.3k	RD¼PS 332J
R118	Carbon film 15k	RD¼PS 153J
R119	Carbon film 3.3k	RD¼PS 332J
R120	Carbon film 3.3k	RD¼PS 332J
R121	Carbon film 47k	RD¼PS 473J
R122	Carbon film 6.2k	RD¼PS 622J
R123	Carbon film 47k	RD¼PS 473J
R124	Carbon film 1.6k	RD¼PS 162J
R125	Carbon film 1.6k	RD¼PS 162J
VR1	Variable resistor (BALANCE) 250k-HB	ACV-135

SEMICONDUCTORS

Symbol	Description	Part No.
Q1	IC	TA7136P1
Q2	IC	TA7136P1
Q3	Transistor	2SA640-E or F
Q4	Transistor	2SA640-E or F
Q5	Transistor	2SC1222-E or F
Q6	Transistor	2SC1222-E or F
Q7	Transistor	2SA640-E or F
Q8	Transistor	2SA640-E or F
Q9	Transistor	2SA640-E or F
Q10	Transistor	2SA640-E or F
Q11	Transistor	2SC1438-V or B
Q12	Transistor	2SC1438-V or B
Q13	Transistor	2SA850-C or D
Q14	Transistor	2SA850-C or D
Q15	Transistor	2SC1735-C or D
Q16	Transistor	2SC1735-C or D
Q17	Transistor	2SB616A-R or Q
Q18	Transistor	2SB616A-R or Q
Q19	Transistor	2SD586A-R or Q
Q20	Transistor	2SD586A-R or Q

Symbol	Description	Part No.
Q21	Transistor	2SA777-R or Q
Q22	Transistor	2SA777-R or Q
Q23	Transistor	2SC1318-R or Q
Q24	Transistor	2SC945A-Q or R
Q25	Transistor	2SA733-Q or R
Q26	Transistor	2SC945A-Q or R
Q27	Transistor	2SC1318-R or Q
D1	Diode	ERC01-02 (30D2)
D2	Diode	ERC01-02 (30D2)
D3	Diode	ERC01-02 (30D2)
D4	Diode	ERC01-02 (30D2)
D5	Diode	SIB01-02 (1S1886)
D6	Diode	SIB01-02 (1S1886)
D7	Diode	1S2473
D8	Diode	1S2473
D9	Varistor	STV-3H-Y
D10	Varistor	STV-3H-Y
D11	Zener diode	WZ-240
D12	Zener diode	WZ-240
D13	Diode	1S2473
D14	Zener diode	EQA01-35R
D15	Thyristor	SM2B41
D16	Diode	1S2473

List of Changed Parts for Factory Modification

Symbol	Description	Part No.

4. SCHEMATIC DIAGRAM, P.C. BOARD PATTERN AND PARTS LIST OF SA-6500II/S

4.1 MISCELLANEOUS PARTS LIST

NOTE:

- *Capacitors: in μF unless otherwise noted p:pF*
- *Resistors: in Ω, ¼W unless otherwise noted k:kΩ, M:MΩ*

SWITCHES

Symbol	Description	Part No.
S1	Rotary switch (FUNCTION)	ASB-050
S6	Rotary switch (SPEAKERS)	ASB-021
S7	Lever switch (POWER)	ASK-065
S8	Line voltage selector (switchable 4 position)	AKR-031

TRANSFORMER

Symbol	Description	Part No.
T1	Power transformer	ATT-361

POTENTIOMETERS

Symbol	Description	Part No.
VR2	Variable resistor (VOLUME) 100k-A	ACV-154
VR3	Variable resistor (TREBLE) 100k-A	ACV-143
VR4	Variable resistor (BASS) 100k-A	ACV-143

CAPACITORS

Symbol	Description			Part No.
C1	Ceramic	0.01	250V	ACG-001
C2	Ceramic	0.01	250V	ACG-001
C3	Ceramic	0.047	50V	CKDYF 473Z 50
C4	Ceramic	0.047	50V	CKDYF 473Z 50
C5	Ceramic	0.047	50V	CKDYF 473Z 50
C6	Ceramic	0.047	50V	CKDYF 473Z 50

LAMP AND FUSES

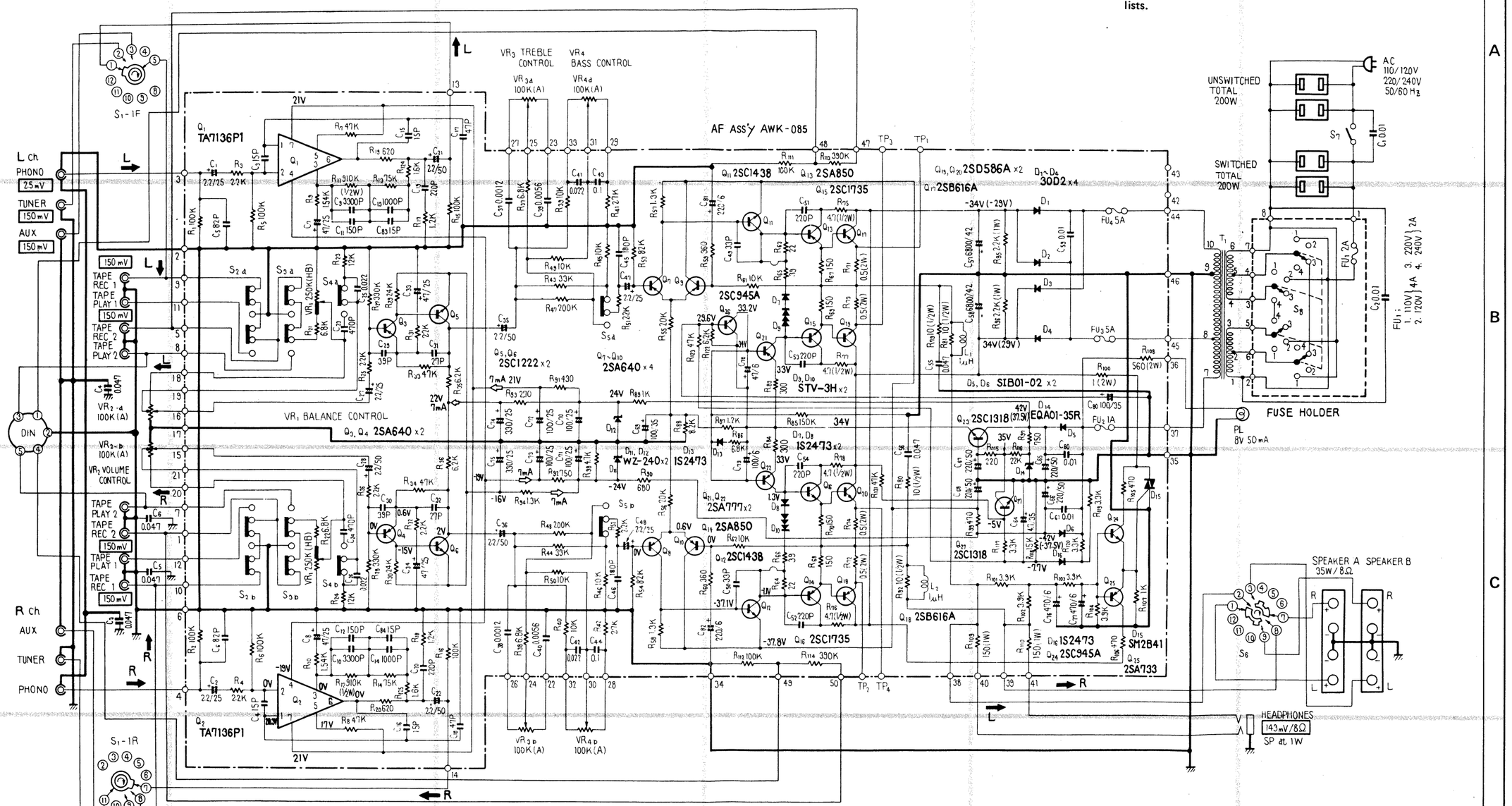
Symbol	Description		Part No.
PL1	Lamp with wire		AEL-062
FU1	Fuse	2A	AEK-103
FU2	Fuse	1A	AEK-106
FU3	Fuse	5A	AEK-108
FU4	Fuse	5A	AEK-108

List of Changed Parts for Factory Modification

Symbol	Description	Part No.

4.2 SCHEMATIC DIAGRAM

NOTE:
The indicated semiconductors are representative ones only. Other alternative semiconductors may be used and are listed in the parts lists.



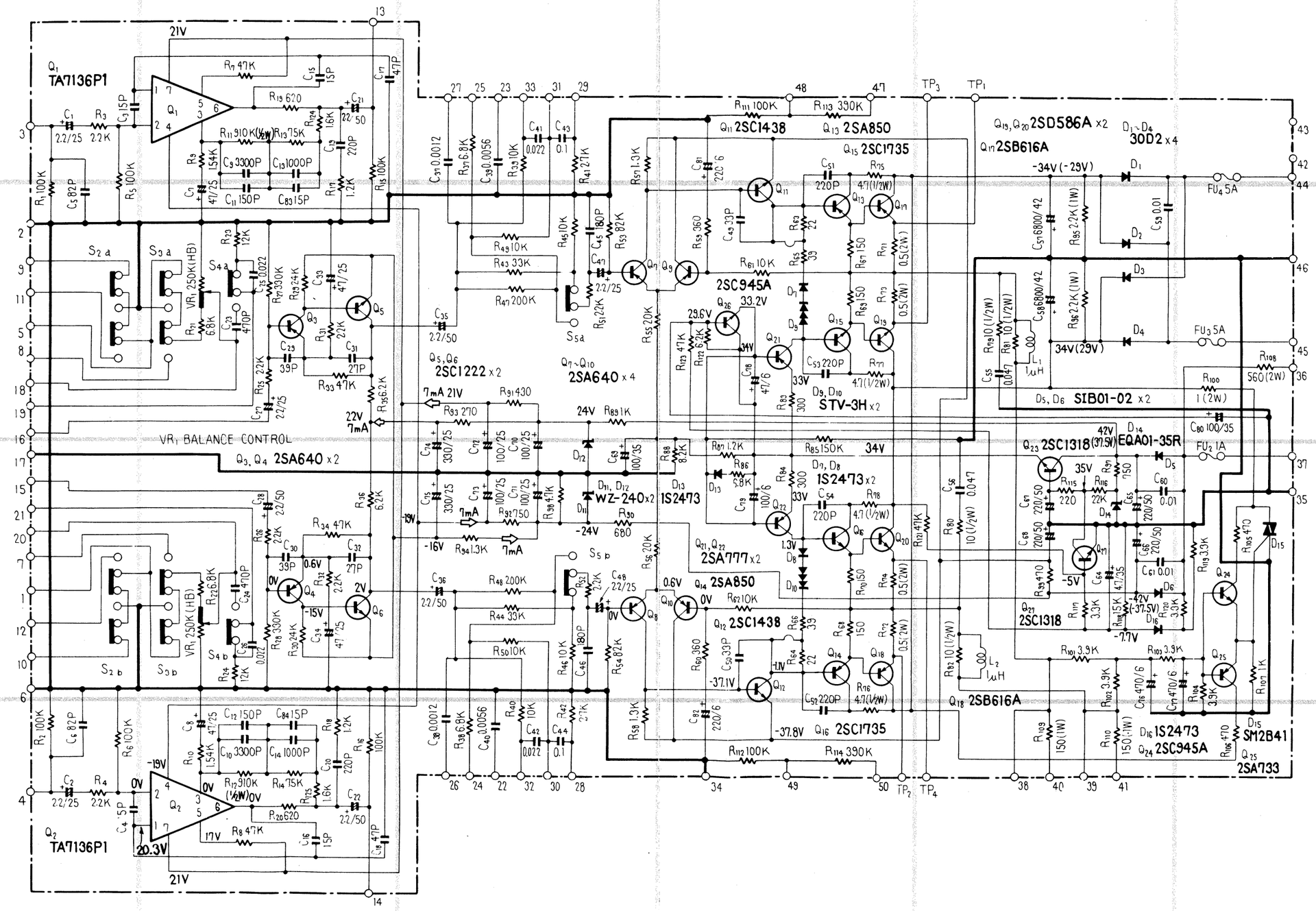
SWITCHES;

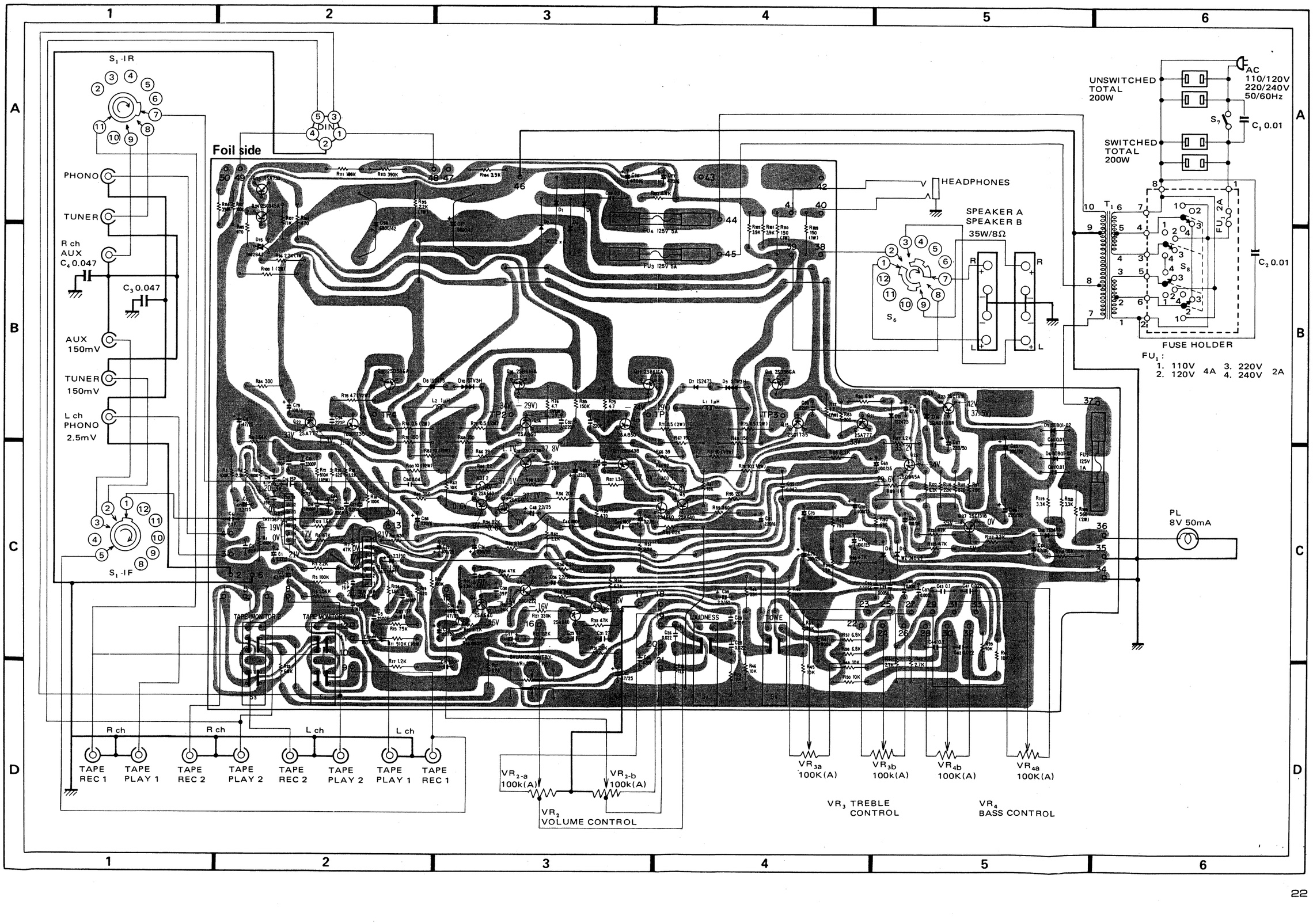
- S_1 FUNCTION: 1. PHONO, 2. TUNER, 3. AUX
- S_2 TAPE MONITOR 1: OFF — ON
- S_3 TAPE MONITOR 2: OFF — ON
- S_4 LOUDNESS: OFF — ON
- S_5 TONE: OFF — ON
- S_6 SPEAKER SELECTOR: 1. SP OFF, 2. SP A, 3. SP B, 4. SP A+B
- S_7 POWER: OFF — ON
- S_8 LINE VOLTAGE SELECTOR: 1. 110V, 2. 120V, 3. 220V, 4. 240V

NOTES;
RESISTORS; IN OHM, 1/4W, ±5% TOLERANCE UNLESS OTHERWISE NOTED K: KΩ M: MΩ
CAPACITORS; IN μF UNLESS OTHERWISE NOTED P: pF

V : DC VOLTAGE AT NO INPUT SIGNAL
(**V**) : DC VOLTAGE AT 30W×2 OUTPUT
⇨ : DC CURRENT AT NO INPUT SIGNAL
mV : SIGNAL VOLTAGE AT 35W×1 OUTPUT (1KHz)

4.3 AF AMPLIFIER ASSEMBLY (AWK-085)




1
2
3
4
5
6
A
B
C
D
Foil side
S1-IR
DIN
PHONO
TUNER
R ch AUX C4 0.047
C3 0.047
AUX 150mV
TUNER 150mV
L ch PHONO 2.5mV
S1-IF
TAPE MONITOR 1
TAPE MONITOR 2
R ch
L ch
TAPE REC 1
TAPE PLAY 1
TAPE REC 2
TAPE PLAY 2
TAPE REC 2
TAPE PLAY 2
TAPE PLAY 1
TAPE REC 1
HEADPHONES
SPEAKER A
SPEAKER B
35W/8Ω
S6
UNSWITCHED TOTAL 200W
SWITCHED TOTAL 200W
AC 110/120V 220/240V 50/60Hz
S7
C1 0.01
C2 0.01
T1
FU1 2A
S8
FUSE HOLDER
FU1 :
1. 110V 4A 3. 220V 2A
2. 120V 4. 240V
FU2 125V 1A
PL 8V 50mA
LOUDNESS
TONE
BALANCE CONTROL
VR2-a 100k(A)
VR2-b 100k(A)
VR2 VOLUME CONTROL
VR3a 100K(A)
VR3b 100k(A)
VR3 TREBLE CONTROL
VR4b 100K(A)
VR4a 100K(A)
VR4 BASS CONTROL

Parts List of AF Amplifier Assembly (AWK-085)

SWITCHES

Symbol	Description	Part No.
S2	Lever switch (TAPE MONITOR 1)	ASK-092
S3	Lever switch (TAPE MONITOR 2)	ASK-092
S4	Lever switch (LOUDNESS)	ASK-089
S5	Lever switch (TONE)	ASK-089

COILS

Symbol	Description	Part No.
L1	Choke coil	ATH-011
L2	Choke coil	ATH-011

CAPACITORS

Symbol	Description			Part No.
C1	Electrolytic	2.2	25V	CSZA 2R2M 25
C2	Electrolytic	2.2	25V	CSZA 2R2M 25
C3	Ceramic	15p	50V	CCDSL 150K 50
C4	Ceramic	15p	50V	CCDSL 150K 50
C5	Ceramic	82p	50V	CCDSL 820K 50
C6	Ceramic	82p	50V	CCDSL 820K 50
C7	Electrolytic	47	25V	CEANL 470P 25
C8	Electrolytic	47	25V	CEANL 470P 25
C9	Polystyrene	3300p	50V	CQSA 332G 50
C10	Polystyrene	3300p	50V	CQSA 332G 50
C11	Ceramic	150p	50V	CCDSL 151K 50
C12	Ceramic	150p	50V	CCDSL 151K 50
C13	Polystyrene	1000p	50V	CQSA 102G 50
C14	Polystyrene	1000p	50V	CQSA 102G 50
C15	Ceramic	15p	50V	CCDSL 150K 50
C16	Ceramic	15p	50V	CCDSL 150K 50
C17	Ceramic	47p	50V	CCDSL 470K 50
C18	Ceramic	47p	50V	CCDSL 470K 50
C19	Ceramic	220p	50V	CCDSL 221K 50
C20	Ceramic	220p	50V	CCDSL 221K 50
C21	Electrolytic	2.2	50V	CEANL 2R2P 50
C22	Electrolytic	2.2	50V	CEANL 2R2P 50
C23	Ceramic	470p	50V	CKDYB 471K 50
C24	Ceramic	470p	50V	CKDYB 471K 50
C25	Ceramic	0.022	50V	CKDYF 223Z 50
C26	Ceramic	0.022	50V	CKDYF 223Z 50
C27	Electrolytic	2.2	25V	CSZA 2R2M 25
C28	Electrolytic	2.2	25V	CSZA 2R2M 25
C29	Ceramic	39p	50V	CCDSL 390K 50
C30	Ceramic	39p	50V	CCDSL 390K 50
C31	Ceramic	27p	50V	CCDSL 270K 50
C32	Ceramic	27p	50V	CCDSL 270K 50
C33	Electrolytic	47	25V	CEANL 470P 25
C34	Electrolytic	47	25V	CEANL 470P 25
C35	Electrolytic	2.2	50V	CEANL 2R2P 50

Symbol	Description			Part No.
C36	Electrolytic	2.2	50V	CEANL 2R2P 50
C37	Ceramic	1200p	50V	CKDYB 122K 50
C38	Ceramic	1200p	50V	CKDYB 122K 50
C39	Ceramic	5600p	50V	CKDYB 562K 50
C40	Ceramic	5600p	50V	CKDYB 562K 50
C41	Mylar	0.022	50V	CQMA 223K 50
C42	Mylar	0.022	50V	CQMA 223K 50
C43	Mylar	0.1	50V	CQMA 104K 50
C44	Mylar	0.1	50V	CQMA 104K 50
C45	Ceramic	180p	50V	CCDSL 181K 50
C46	Ceramic	180p	50V	CCDSL 181K 50
C47	Electrolytic	2.2	25V	CSZA 2R2M 25
C48	Electrolytic	2.2	25V	CSZA 2R2M 25
C49	Ceramic	33p	500V	CCDSL 330K 500
C50	Ceramic	33p	500V	CCDSL 330K 500
C51	Ceramic	220p	500V	CCDSL 221K 500
C52	Ceramic	220p	500V	CCDSL 221K 500
C53	Ceramic	220p	500V	CCDSL 221K 500
C54	Ceramic	220p	500V	CCDSL 221K 500
C55	Ceramic	0.047	50V	CKDYF 473Z 50
C56	Ceramic	0.047	50V	CKDYF 473Z 50
C57	Electrolytic	6800	42V	ACH-073
C58	Electrolytic	6800	42V	ACH-073
C59	Ceramic	0.01	150V	ACG-004
C60	Ceramic	0.01	150V	ACG-004
C61	Ceramic	0.01	150V	ACG-004
C62				
C63				
C64	Electrolytic	4.7	35V	CEA 4R7P 35
C65	Electrolytic	220	50V	CEA 221P 50
C66	Electrolytic	220	50V	CEA 221P 50
C67	Electrolytic	220	35V	ACH-325
C68	Electrolytic	220	50V	CEA 221P 50
C69	Electrolytic	100	35V	CEA 101P 35
C70	Electrolytic	100	25V	CEA 101P 25
C71	Electrolytic	100	25V	CEA 101P 25
C72	Electrolytic	100	25V	CEA 101P 25
C73	Electrolytic	100	25V	CEA 101P 25
C74	Electrolytic	330	25V	CEA 331P 25
C75	Electrolytic	330	25V	CEA 331P 25
C76	Electrolytic	470	6V	CEA 471P 6
C77	Electrolytic	470	6V	CEA 471P 6
C78	Electrolytic	47	6V	CEA 470P 6
C79	Electrolytic	100	6V	CEA 101P 6
C80	Electrolytic	100	35V	CEA 101P 35
C81	Electrolytic	220	6V	CEA 221P 6
C82	Electrolytic	220	6V	CEA 221P 6
C83	Ceramic	15p	50V	CCDSL 150K 50
C84	Ceramic	15p	50V	CCDSL 150K 50

RESISTORS

Symbol	Description			Part No.
R1	Carbon film	100k		RD¼PS 104JNL
R2	Carbon film	100k		RD¼PS 104JNL
R3	Carbon film	2.2k		RD¼PS 222J
R4	Carbon film	2.2k		RD¼PS 222J
R5	Carbon film	100k		RD¼PS 104JNL
R6	Carbon film	100k		RD¼PS 104JNL
R7	Carbon film	47k		RD¼PS 473J
R8	Carbon film	47k		RD¼PS 473J
R9	Metal film	1.54k		RN¼PT 1541F
R10	Metal film	1.54k		RN¼PT 1541F
R11	Metal film	910k	½W	RN½PT 9103F
R12	Metal film	910k	½W	RN½PT 9103F
R13	Metal film	75k		RN¼PT 7502F
R14	Metal film	75k		RN¼PT 7502F
R15	Carbon film	100k		RD¼PS 104J
R16	Carbon film	100k		RD¼PS 104J
R17	Carbon film	1.2k		RD¼PS 122J
R18	Carbon film	1.2k		RD¼PS 122J
R19	Carbon film	620		RD¼PS 621J
R20	Carbon film	620		RD¼PS 621J
R21	Carbon film	6.8k		RD¼PS 682J
R22	Carbon film	6.8k		RD¼PS 682J
R23	Carbon film	12k		RD¼PS 123J
R24	Carbon film	12k		RD¼PS 123J
R25	Carbon film	2.2k		RD¼PS 222J
R26	Carbon film	2.2k		RD¼PS 222J
R27	Carbon film	330k		RD¼PS 334JNL
R28	Carbon film	330k		RD¼PS 334JNL
R29	Carbon film	24k		RD¼PS 243J
R30	Carbon film	24k		RD¼PS 243J
R31	Carbon film	2.2k		RD¼PS 222J
R32	Carbon film	2.2k		RD¼PS 222J
R33	Carbon film	47k		RD¼PS 473JNL
R34	Carbon film	47k		RD¼PS 473JNL
R35	Carbon film	6.2k		RD¼PS 622J
R36	Carbon film	6.2k		RD¼PS 622J
R37	Carbon film	6.8k		RD¼PS 682J
R38	Carbon film	6.8k		RD¼PS 682J
R39	Carbon film	10k		RD¼PS 103J
R40	Carbon film	10k		RD¼PS 103J
R41	Carbon film	2.7k		RD¼PS 272J
R42	Carbon film	2.7k		RD¼PS 272J
R43	Carbon film	33k		RD¼PS 333J
R44	Carbon film	33k		RD¼PS 333J
R45	Carbon film	10k		RD¼PS 103J
R46	Carbon film	10k		RD¼PS 103J
R47	Carbon film	200k		RD¼PS 204J
R48	Carbon film	200k		RD¼PS 204J
R49	Carbon film	10k		RD¼PS 103J
R50	Carbon film	10k		RD¼PS 103J

Symbol	Description			Part No.
R51	Carbon film	2.2k		RD¼PS 222J
R52	Carbon film	2.2k		RD¼PS 222J
R53	Carbon film	82k		RD¼PS 823JNL
R54	Carbon film	82k		RD¼PS 823JNL
R55	Carbon film	20k		RD¼PS 203J
R56	Carbon film	20k		RD¼PS 203J
R57	Carbon film	1.3k		RD¼PS 132J
R58	Carbon film	1.3k		RD¼PS 132J
R59	Carbon film	360		RD¼PS 361J
R60	Carbon film	360		RD¼PS 361J
R61	Carbon film	10k		RD¼PS 103J
R62	Carbon film	10k		RD¼PS 103J
R63	Carbon film	22		RD¼PS 220J
R64	Carbon film	22		RD¼PS 220J
R65	Carbon film	39		RD¼PS 390J
R66	Carbon film	39		RD¼PS 390J
R67	Carbon film	150		RD¼PSF 151J
R68	Carbon film	150		RD¼PSF 151J
R69	Carbon film	150		RD¼PSF 151J
R70	Carbon film	150		RD¼PSF 151J
R71	Metal film	0.5	2W	RN2H 0R5K
R72	Metal film	0.5	2W	RN2H 0R5K
R73	Metal film	0.5	2W	RN2H 0R5K
R74	Metal film	0.5	2W	RN2H 0R5K
R75	Carbon film	4.7	½W	RD½PSF 4R7J
R76	Carbon film	4.7	½W	RD½PSF 4R7J
R77	Carbon film	4.7	½W	RD½PSF 4R7J
R78	Carbon film	4.7	½W	RD½PSF 4R7J
R79	Carbon film	10	½W	RD½PSF 100J
R80	Carbon film	10	½W	RD½PSF 100J
R81	Carbon film	10	½W	RD½PSF 100J
R82	Carbon film	10	½W	RD½PSF 100J
R83	Carbon film	300		RD¼PS 301J
R84	Carbon film	300		RD¼PS 301J
R85	Carbon film	150k		RD¼PS 154J
R86	Carbon film	6.8k		RD¼PS 682J
R87	Carbon film	1.2k		RD¼PS 122J
R88	Carbon film	8.2k		RD¼PS 822J
R89	Carbon film	1k		RD¼PS 102J
R90	Carbon film	680		RD¼PS 681J
R91	Carbon film	430		RD¼PS 431J
R92	Carbon film	750		RD¼PS 751J
R93	Carbon film	270		RD¼PS 271J
R94	Carbon film	1.3k		RD¼PS 132J
R95	Metal oxide film	2.2k	1W	RS1P 222J
R96	Metal oxide film	2.2k	1W	RS1P 222J
R97	Carbon film	750		RD¼PS 751J
R98	Carbon film	4.7k		RD¼PS 472J
R99	Carbon film	470		RD¼PSF 471J
R100	Metal film	1	2W	RN2H 010K

Symbol	Description	Part No.
R101	Carbon film 3.9k	RD¼PS 392J
R102	Carbon film 3.9k	RD¼PS 392J
R103	Carbon film 3.9k	RD¼PS 392J
R104	Carbon film 3.9k	RD¼PS 392J
R105	Carbon film 470	RD¼PS 471J
R106	Carbon film 470	RD¼PS 471J
R107	Carbon film 1k	RD¼PS 102J
R108	Metal oxide film 560 2W	RS2P 561J
R109	Metal oxide film 150 1W	RS1P 151J
R110	Metal oxide film 150 1W	RS1P 151J
R111	Carbon film 100k	RD¼PS 104J
R112	Carbon film 100k	RD¼PS 104J
R113	Carbon film 390k	RD¼PS 394J
R114	Carbon film 390k	RD¼PS 394J
R115	Carbon film 220	RD¼PS 221J
R116	Carbon film 22k	RD¼PS 223J
R117	Carbon film 3.3k	RD¼PS 332J
R118	Carbon film 15k	RD¼PS 153J
R119	Carbon film 3.3k	RD¼PS 332J
R120	Carbon film 3.3k	RD¼PS 332J
R121	Carbon film 47k	RD¼PS 473J
R122	Carbon film 6.2k	RD¼PS 622J
R123	Carbon film 47k	RD¼PS 473J
R124	Carbon film 1.6k	RD¼PS 162J
R125	Carbon film 1.6k	RD¼PS 162J
VR1	Variable resistor (BALANCE) 250k-HB	ACV-135

SEMICONDUCTORS

Symbol	Description	Part No.
Q1	IC	TA7136P1
Q2	IC	TA7136P1
Q3	Transistor	2SA640-E or F
Q4	Transistor	2SA640-E or F
Q5	Transistor	2SC1222-E or F
Q6	Transistor	2SC1222-E or F
Q7	Transistor	2SA640-E or F
Q8	Transistor	2SA640-E or F
Q9	Transistor	2SA640-E or F
Q10	Transistor	2SA640-E or F
Q11	Transistor	2SC1438-V or B
Q12	Transistor	2SC1438-V or B
Q13	Transistor	2SA850-C or D
Q14	Transistor	2SA850-C or D
Q15	Transistor	2SC1735-C or D
Q16	Transistor	2SC1735-C or D
Q17	Transistor	2SB616A-R or Q
Q18	Transistor	2SB616A-R or Q
Q19	Transistor	2SD586A-R or Q
Q20	Transistor	2SD586A-R or Q

Symbol	Description	Part No.
Q21	Transistor	2SA777-R or Q
Q22	Transistor	2SA777-R or Q
Q23	Transistor	2SC1318-R or Q
Q24	Transistor	2SC945A-Q or R
Q25	Transistor	2SA733-Q or R
Q26	Transistor	2SC945A-Q or R
Q27	Transistor	2SC1318-R or Q
D1	Diode	ERC01-02 (30D2)
D2	Diode	ERC01-02 (30D2)
D3	Diode	ERC01-02 (30D2)
D4	Diode	ERC01-02 (30D2)
D5	Diode	SIB01-02 (1S1886)
D6	Diode	SIB01-02 (1S1886)
D7	Diode	1S2473
D8	Diode	1S2473
D9	Varistor	STV-3H-Y
D10	Varistor	STV-3H-Y
D11	Zener diode	WZ-240
D12	Zener diode	WZ-240
D13	Diode	1S2473
D14	Zener diode	EQA-01-035R
D15	Thyristor	SM2B41
D16	Diode	1S2473

List of Changed Parts for Factory Modification

Symbol	Description	Part No.

5. SCHEMATIC DIAGRAM, P.C. BOARD PATTERN AND PARTS LIST OF SA-6500II/KC

5.1 MISCELLANEOUS PARTS LIST

NOTE:
- *Capacitors: in μF unless otherwise noted p:pF*
- *Resistors: in Ω, ¼W unless otherwise noted k:kΩ, M:MΩ*

SWITCHES

Symbol	Description	Part No.
S1	Rotary switch (FUNCTION)	ASB-050
S6	Rotary switch (SPEAKERS)	ASB-021
S7	Lever switch (POWER)	ASK-065

TRANSFORMER

Symbol	Description	Part No.
T1	Power transformer	ATT-399

RESISTOR AND POTENTIOMETERS

Symbol	Description	Part No.
VR2	Variable resistor (VOLUME) 100k-A	ACV-154
VR3	Variable resistor (TREBLE) 100k-A	ACV-143
VR4	Variable resistor (BASS) 100k-A	ACV-143

CAPACITORS

Symbol	Description			Part No.
C1	Ceramic	0.01	125V	ACG-014
C2	Ceramic	0.01	125V	ACG-014
C3	Ceramic	0.047	50V	CKDYF 473Z 50
C4	Ceramic	0.047	50V	CKDYF 473Z 50
C5	Ceramic	0.047	50V	CKDYF 473Z 50
C6	Ceramic	0.047	50V	CKDYF 473Z 50

LAMP AND FUSES

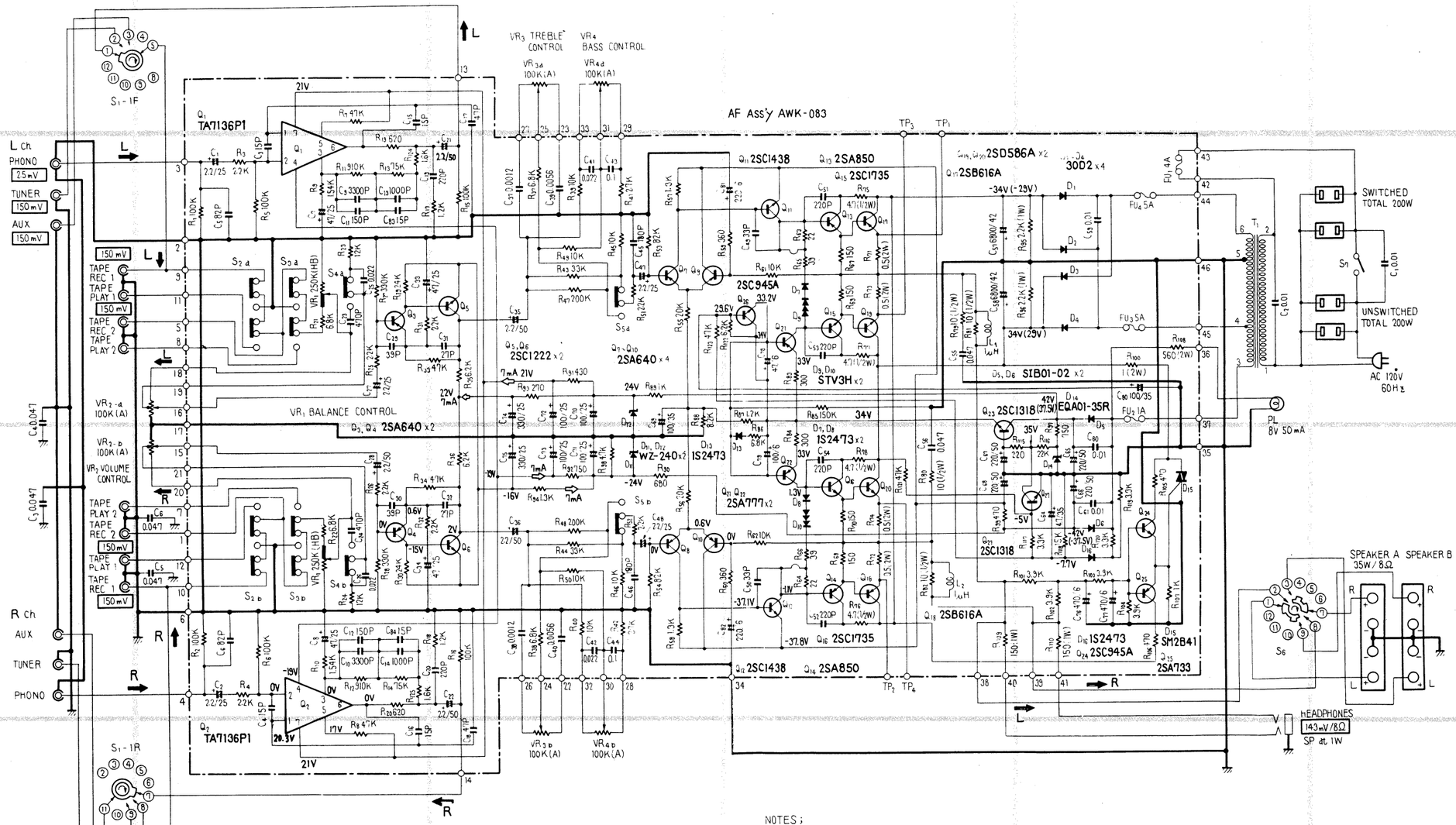
Symbol	Description			Part No.
PL1	Lamp with wire	8V	50mA	AEL-047
FU1	Fuse (Primary) 4A			AEK-100
FU2	Fuse (Secondary) 1A			AEK-106
FU3	Fuse (Secondary) 5A			AEK-108
FU4	Fuse (Secondary) 5A			AEK-108

List of Changed Parts for Factory Modification

Symbol	Description	Part No.

5.2 SCHEMATIC DIAGRAM

NOTE:
The indicated semiconductors are representative ones only, Other alternative semiconductors may be used and are listed in the parts list.



SWITCHES;

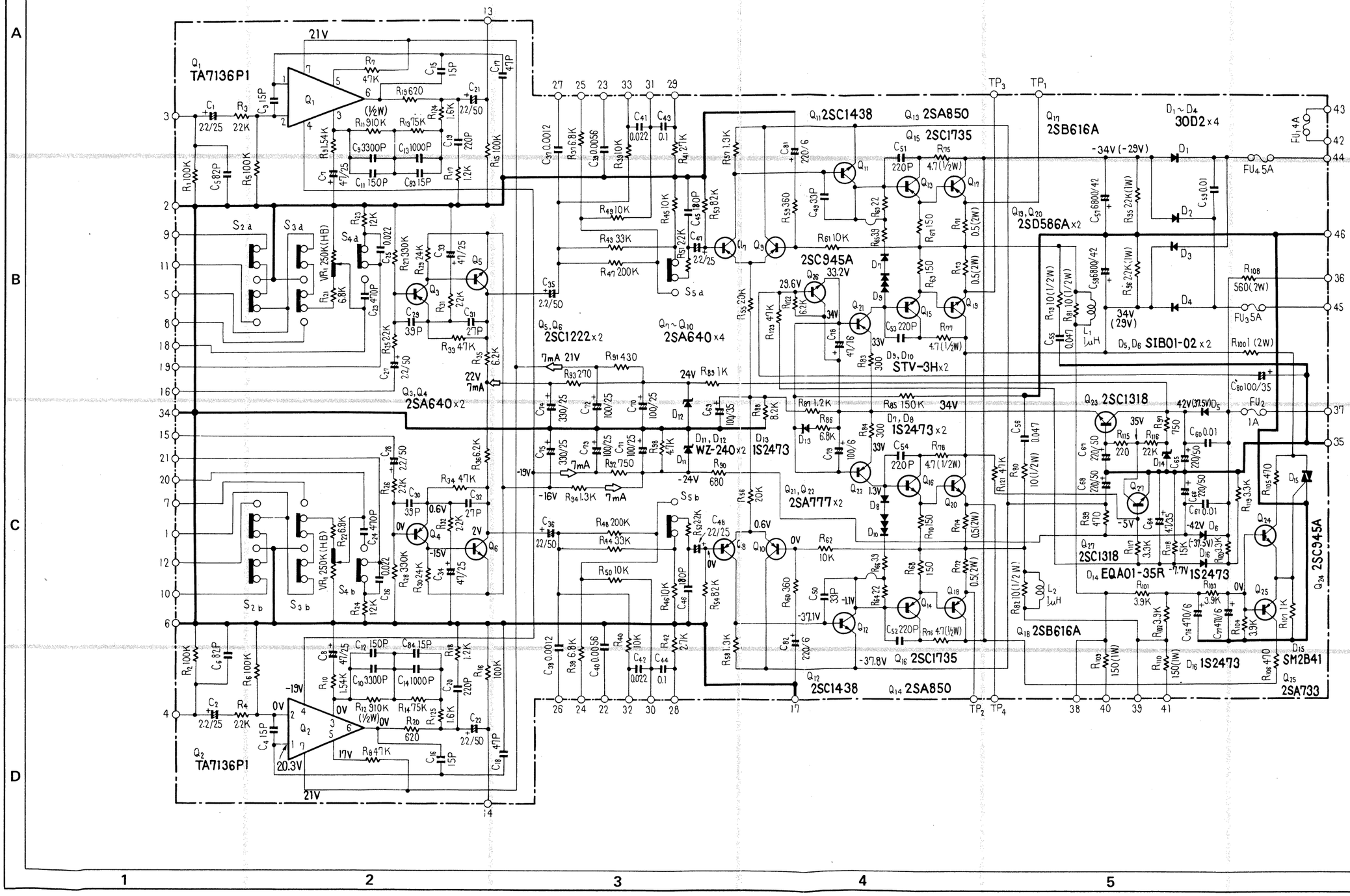
S_1	FUNCTION 1. PHONO 2. TUNER 3. AUX	S_3	TAPE MONITOR 2 OFF — ON	S_6	SPEAKER SELECTOR 1. SP OFF 2. SP A 3. SP B 4. SP A+B
S_2	TAPE MONITOR 1 OFF — ON	S_4	LOUDNESS OFF — ON	S_7	POWER OFF — ON
		S_5	TONE OFF — ON		

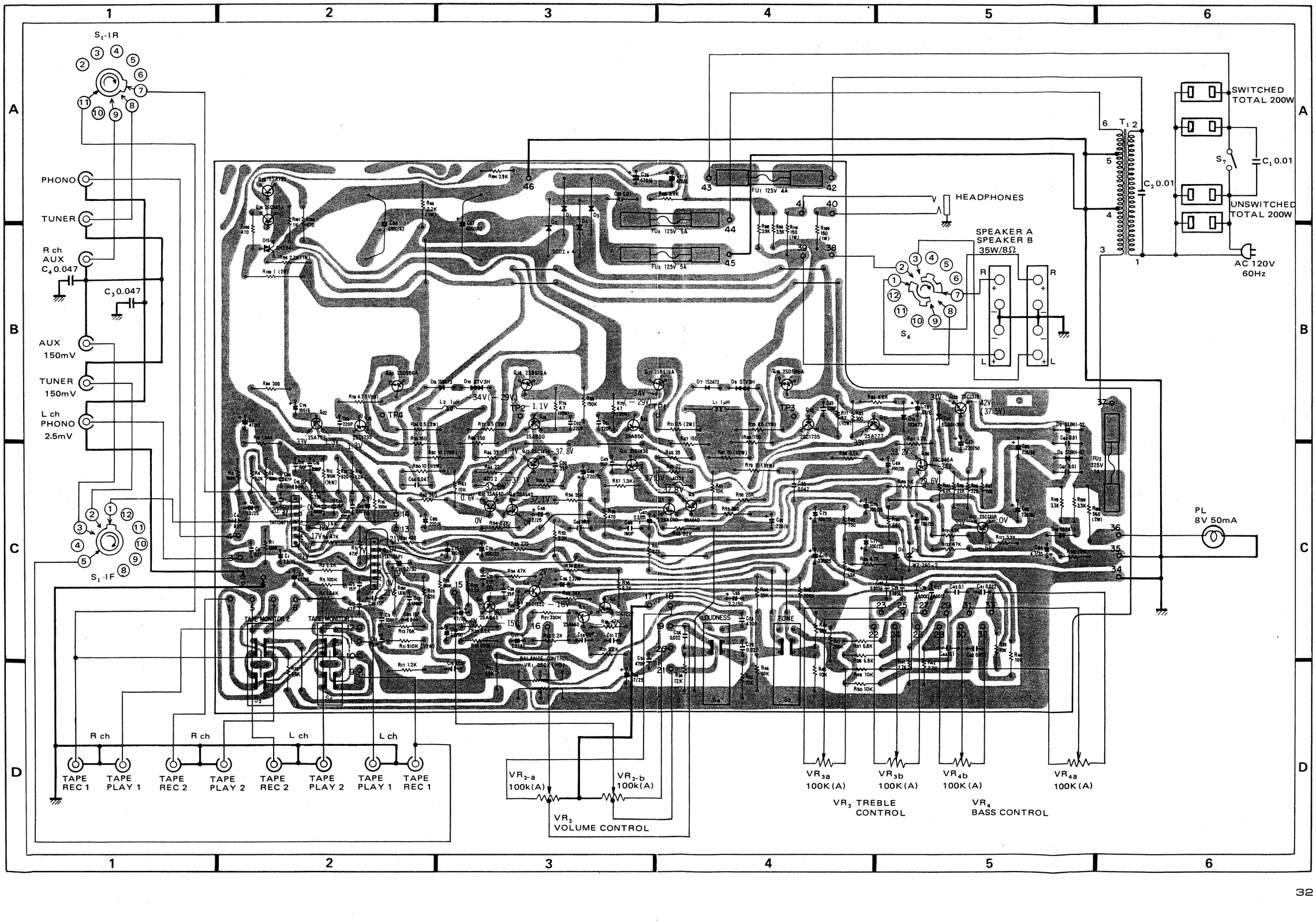
NOTES;
RESISTORS;
IN OHM, 1/4W, ±5% TOLERANCE UNLESS OTHERWISE NOTED K: kΩ M: MΩ

CAPACITORS;
IN μF UNLESS OTHERWISE NOTED P: pF

V : DC VOLTAGE AT NO INPUT SIGNAL
(V) : DC VOLTAGE AT 90W x2 OUTPUT
⇨ : DC CURRENT AT NO INPUT SIGNAL
mV : SIGNAL VOLTAGE AT 35W x1 OUTPUT (1KHz)

5.3 AF AMPLIFIER ASSEMBLY (AWK-083)




S1-IR
PHONO
TUNER
R ch
AUX
C4 0.047
C3 0.047
AUX
150mV
TUNER
150mV
L ch
PHONO
2.5mV
S1-IF
R ch
R ch
L ch
L ch
TAPE REC 1
TAPE PLAY 1
TAPE REC 2
TAPE PLAY 2
TAPE REC 2
TAPE PLAY 2
TAPE PLAY 1
TAPE REC 1
VR2-a 100k(A)
VR2-b 100k(A)
VR2 VOLUME CONTROL
VR3a 100K(A)
VR3b 100K(A)
VR3 TREBLE CONTROL
VR4b 100K(A)
VR4 BASS CONTROL
VR4a 100K(A)
HEADPHONES
SPEAKER A
SPEAKER B
35W/8Ω
S6
T1
C2 0.01
S7
C1 0.01
SWITCHED TOTAL 200W
UNSWITCHED TOTAL 200W
AC 120V 60Hz
PL 8V 50mA
FU1 125V 4A
FU2 125V 1A
FU3 125V 5A
FU4 125V 5A
LOUDNESS
TONE
BALANCE CONTROL
TAPE MONITOR 1
TAPE MONITOR 2
TP1
TP2
TP3

Parts List of AF Amplifier Assembly (AWK-083)

SWITCHES

Symbol	Description	Part No.
S2	Lever switch (TAPE MONITOR 1)	ASK-092
S3	Lever switch (TAPE MONITOR 2)	ASK-092
S4	Lever switch (LOUDNESS)	ASK-089
S5	Lever switch (TONE)	ASK-089

COILS

Symbol	Description	Part No.
L1	Choke coil	ATH-011
L2	Choke coil	ATH-011

CAPACITORS

Symbol	Description			Part No.
C1	Electrolytic	2.2	25V	CSZA 2R2M 25
C2	Electrolytic	2.2	25V	CSZA 2R2M 25
C3	Ceramic	15p	50V	CCDSL 150K 50
C4	Ceramic	15p	50V	CCDSL 150K 50
C5	Ceramic	82p	50V	CCDSL 820K 50
C6	Ceramic	82p	50V	CCDSL 820K 50
C7	Electrolytic	47	25V	CEANL 470P 25
C8	Electrolytic	47	25V	CEANL 470P 25
C9	Polystyrene	3300p	50V	CQSA 332G 50
C10	Polystyrene	3300p	50V	CQSA 332G 50
C11	Ceramic	150p	50V	CCDSL 151K 50
C12	Ceramic	150p	50V	CCDSL 151K 50
C13	Polystyrene	1000p	50V	CQSA 102G 50
C14	Polystyrene	1000p	50V	CQSA 102G 50
C15	Ceramic	15p	50V	CCDSL 150K 50
C16	Ceramic	15p	50V	CCDSL 150K 50
C17	Ceramic	47p	50V	CCDSL 470K 50
C18	Ceramic	47p	50V	CCDSL 470K 50
C19	Ceramic	220p	50V	CCDSL 221K 50
C20	Ceramic	220p	50V	CCDSL 221K 50
C21	Electrolytic	2.2	50V	CEANL 2R2P 50
C22	Electrolytic	2.2	50V	CEANL 2R2P 50
C23	Ceramic	470p	50V	CKDYB 471K 50
C24	Ceramic	470p	50V	CKDYB 471K 50
C25	Ceramic	0.022	50V	CKDYF 223Z 50
C26	Ceramic	0.022	50V	CKDYF 223Z 50
C27	Electrolytic	2.2	25V	CSZA 2R2M 25
C28	Electrolytic	2.2	25V	CSZA 2R2M 25
C29	Ceramic	39p	50V	CCDSL 390K 50
C30	Ceramic	39p	50V	CCDSL 390K 50
C31	Ceramic	27p	50V	CCDSL 270K 50
C32	Ceramic	27p	50V	CCDSL 270K 50
C33	Electrolytic	47	25V	CEANL 470P 25
C34	Electrolytic	47	25V	CEANL 470P 25
C35	Electrolytic	2.2	50V	CEANL 2R2P 50

Symbol	Description			Part No.
C36	Electrolytic	2.2	50V	CEANL 2R2P 50
C37	Ceramic	1200p	50V	CKDYB 122K 50
C38	Ceramic	1200p	50V	CKDYB 122K 50
C39	Ceramic	5600p	50V	CKDYB 562K 50
C40	Ceramic	5600p	50V	CKDYB 562K 50
C41	Mylar	0.022	50V	CQMA 223K 50
C42	Mylar	0.022	50V	CQMA 223K 50
C43	Mylar	0.1	50V	CQMA 104K 50
C44	Mylar	0.1	50V	CQMA 104K 50
C45	Ceramic	180p	50V	CCDSL 181K 50
C46	Ceramic	180p	50V	CCDSL 181K 50
C47	Electrolytic	2.2	25V	CSZA 2R2M 25
C48	Electrolytic	2.2	25V	CSZA 2R2M 25
C49	Ceramic	33p	500V	CCDSL 330K 500
C50	Ceramic	33p	500V	CCDSL 330K 500
C51	Ceramic	220p	500V	CCDSL 221K 500
C52	Ceramic	220p	500V	CCDSL 221K 500
C53	Ceramic	220p	500V	CCDSL 221K 500
C54	Ceramic	220p	500V	CCDSL 221K 500
C55	Ceramic	0.047	50V	CKDYF 473Z 50
C56	Ceramic	0.047	50V	CKDYF 473Z 50
C57	Electrolytic	6800	42V	ACH-073
C58	Electrolytic	6800	42V	ACH-073
C59	Ceramic	0.01	150V	ACG-004
C60	Ceramic	0.01	150V	ACG-004
C61	Ceramic	0.01	150V	ACG-004
C62				
C63				
C64	Electrolytic	4.7	35V	CEA 4R7P 35
C65	Electrolytic	220	50V	CEA 221P 50
C66	Electrolytic	220	50V	CEA 221P 50
C67	Electrolytic	220	35V	ACH-325
C68	Electrolytic	220	50V	CEA 221P 50
C69	Electrolytic	100	35V	CEA 101P 35
C70	Electrolytic	100	25V	CEA 101P 25
C71	Electrolytic	100	25V	CEA 101P 25
C72	Electrolytic	100	25V	CEA 101P 25
C73	Electrolytic	100	25V	CEA 101P 25
C74	Electrolytic	330	25V	CEA 331P 25
C75	Electrolytic	330	25V	CEA 331P 25
C76	Electrolytic	470	6V	CEA 471P 6
C77	Electrolytic	470	6V	CEA 471P 6
C78	Electrolytic	47	6V	CEA 470P 6
C79	Electrolytic	100	6V	CEA 101P 6
C80	Electrolytic	100	35V	CEA 101P 35
C81	Electrolytic	220	6V	CEA 221P 6
C82	Electrolytic	220	6V	CEA 221P 6
C83	Ceramic	15p	50V	CCDSL 150K 50
C84	Ceramic	15p	50V	CCDSL 150K 50

RESISTORS

Symbol	Description			Part No.
R1	Carbon film	100k		RD¼PS 104JNL
R2	Carbon film	100k		RD¼PS 104JNL
R3	Carbon film	2.2k		RD¼PS 222J
R4	Carbon film	2.2k		RD¼PS 222J
R5	Carbon film	100k		RD¼PS 104JNL
R6	Carbon film	100k		RD¼PS 104JNL
R7	Carbon film	47k		RD¼PS 473J
R8	Carbon film	47k		RD¼PS 473J
R9	Metal film	1.54k		RN¼PT 1541F
R10	Metal film	1.54k		RN¼PT 1541F
R11	Metal film	910k	½W	RN½PT 9103F
R12	Metal film	910k	½W	RN½PT 9103F
R13	Metal film	75k		RN¼PT 7502F
R14	Metal film	75k		RN¼PT 7502F
R15	Carbon film	100k		RD¼PS 104J
R16	Carbon film	100k		RD¼PS 104J
R17	Carbon film	1.2k		RD¼PS 122J
R18	Carbon film	1.2k		RD¼PS 122J
R19	Carbon film	620		RD¼PS 621J
R20	Carbon film	620		RD¼PS 621J
R21	Carbon film	6.8k		RD¼PS 682J
R22	Carbon film	6.8k		RD¼PS 682J
R23	Carbon film	12k		RD¼PS 123J
R24	Carbon film	12k		RD¼PS 123J
R25	Carbon film	2.2k		RD¼PS 222J
R26	Carbon film	2.2k		RD¼PS 222J
R27	Carbon film	330k		RD¼PS 334JNL
R28	Carbon film	330k		RD¼PS 334JNL
R29	Carbon film	24k		RD¼PS 243J
R30	Carbon film	24k		RD¼PS 243J
R31	Carbon film	2.2k		RD¼PS 222J
R32	Carbon film	2.2k		RD¼PS 222J
R33	Carbon film	47k		RD¼PS 473JNL
R34	Carbon film	47k		RD¼PS 473JNL
R35	Carbon film	6.2k		RD¼PS 622J
R36	Carbon film	6.2k		RD¼PS 622J
R37	Carbon film	6.8k		RD¼PS 682J
R38	Carbon film	6.8k		RD¼PS 682J
R39	Carbon film	10k		RD¼PS 103J
R40	Carbon film	10k		RD¼PS 103J
R41	Carbon film	2.7k		RD¼PS 272J
R42	Carbon film	2.7k		RD¼PS 272J
R43	Carbon film	33k		RD¼PS 333J
R44	Carbon film	33k		RD¼PS 333J
R45	Carbon film	10k		RD¼PS 103J
R46	Carbon film	10k		RD¼PS 103J
R47	Carbon film	200k		RD¼PS 204J
R48	Carbon film	200k		RD¼PS 204J
R49	Carbon film	10k		RD¼PS 103J
R50	Carbon film	10k		RD¼PS 103J

Symbol	Description			Part No.
R51	Carbon film	2.2k		RD¼PS 222J
R52	Carbon film	2.2k		RD¼PS 222J
R53	Carbon film	82k		RD¼PS 823JNL
R54	Carbon film	82k		RD¼PS 823JNL
R55	Carbon film	20k		RD¼PS 203J
R56	Carbon film	20k		RD¼PS 203J
R57	Carbon film	1.3k		RD¼PS 132J
R58	Carbon film	1.3k		RD¼PS 132J
R59	Carbon film	360		RD¼PS 361J
R60	Carbon film	360		RD¼PS 361J
R61	Carbon film	10k		RD¼PS 103J
R62	Carbon film	10k		RD¼PS 103J
R63	Carbon film	22		RD¼PS 220J
R64	Carbon film	22		RD¼PS 220J
R65	Carbon film	39		RD¼PS 390J
R66	Carbon film	39		RD¼PS 390J
R67	Carbon film	150		RD¼PSF 151J
R68	Carbon film	150		RD¼PSF 151J
R69	Carbon film	150		RD¼PSF 151J
R70	Carbon film	150		RD¼PSF 151J
R71	Metal film	0.5	2W	RN2H 0R5K
R72	Metal film	0.5	2W	RN2H 0R5K
R73	Metal film	0.5	2W	RN2H 0R5K
R74	Metal film	0.5	2W	RN2H 0R5K
R75	Carbon film	4.7	½W	RD½PSF 4R7J
R76	Carbon film	4.7	½W	RD½PSF 4R7J
R77	Carbon film	4.7	½W	RD½PSF 4R7J
R78	Carbon film	4.7	½W	RD½PSF 4R7J
R79	Carbon film	10	½W	RD½PSF 100J
R80	Carbon film	10	½W	RD½PSF 100J
R81	Carbon film	10	½W	RD½PSF 100J
R82	Carbon film	10	½W	RD½PSF 100J
R83	Carbon film	300		RD¼PS 301J
R84	Carbon film	300		RD¼PS 301J
R85	Carbon film	150k		RD¼PS 154J
R86	Carbon film	6.8k		RD¼PS 682J
R87	Carbon film	1.2k		RD¼PS 122J
R88	Carbon film	8.2k		RD¼PS 822J
R89	Carbon film	1k		RD¼PS 102J
R90	Carbon film	680		RD¼PS 681J
R91	Carbon film	430		RD¼PS 431J
R92	Carbon film	750		RD¼PS 751J
R93	Carbon film	270		RD¼PS 271J
R94	Carbon film	1.3k		RD¼PS 132J
R95	Metal oxide film	2.2k	1W	RS1P 222J
R96	Metal oxide film	2.2k	1W	RS1P 222J
R97	Carbon film	750		RD¼PS 751J
R98	Carbon film	4.7k		RD¼PS 472J
R99	Carbon film	470		RD¼PSF 471J
R100	Metal film	1	2W	RN2H 010K

Symbol	Description	Part No.
R101	Carbon film 3.9k	RD¼PS 392J
R102	Carbon film 3.9k	RD¼PS 392J
R103	Carbon film 3.9k	RD¼PS 392J
R104	Carbon film 3.9k	RD¼PS 392J
R105	Carbon film 470	RD¼PS 471J
R106	Carbon film 470	RD¼PS 471J
R107	Carbon film 1k	RD¼PS 102J
R108	Metal oxide film 560 2W	RS2P 561J
R109	Metal oxide film 150 1W	RS1P 151J
R110	Metal oxide film 150 1W	RS1P 151J
R111	Carbon film 100k	RD¼PS 104J
R112	Carbon film 100k	RD¼PS 104J
R113	Carbon film 390k	RD¼PS 394J
R114	Carbon film 390k	RD¼PS 394J
R115	Carbon film 220	RD¼PS 221J
R116	Carbon film 22k	RD¼PS 223J
R117	Carbon film 3.3k	RD¼PS 332J
R118	Carbon film 15k	RD¼PS 153J
R119	Carbon film 3.3k	RD¼PS 332J
R120	Carbon film 3.3k	RD¼PS 332J
R121	Carbon film 47k	RD¼PS 473J
R122	Carbon film 6.2k	RD¼PS 622J
R123	Carbon film 47k	RD¼PS 473J
R124	Carbon film 1.6k	RD¼PS 162J
R125	Carbon film 1.6k	RD¼PS 162J
VR1	Variable resistor (BALANCE) 250k-HB	ACV-135

SEMICONDUCTORS

Symbol	Description	Part No.
Q1	IC	TA7136P1
Q2	IC	TA7136P1
Q3	Transistor	2SA640-E or F
Q4	Transistor	2SA640-E or F
Q5	Transistor	2SC1222-E or F
Q6	Transistor	2SC1222-E or F
Q7	Transistor	2SA640-E or F
Q8	Transistor	2SA640-E or F
Q9	Transistor	2SA640-E or F
Q10	Transistor	2SA640-E or F
Q11	Transistor	2SC1438-V or B
Q12	Transistor	2SC1438-V or B
Q13	Transistor	2SA850-C or D
Q14	Transistor	2SA850-C or D
Q15	Transistor	2SC1735-C or D
Q16	Transistor	2SC1735-C or D
Q17	Transistor	2SB616A-R or Q
Q18	Transistor	2SB616A-R or Q
Q19	Transistor	2SD586A-R or Q
Q20	Transistor	2SD586A-R or Q

Symbol	Description	Part No.
Q21	Transistor	2SA777-R or Q
Q22	Transistor	2SA777-R or Q
Q23	Transistor	2SC1318-R or Q
Q24	Transistor	2SC945A-Q or R
Q25	Transistor	2SA733-Q or R
Q26	Transistor	2SC945A-Q or R
Q27	Transistor	2SC1318-R or Q
D1	Diode	ERC01-02 (30D2)
D2	Diode	ERC01-02 (30D2)
D3	Diode	ERC01-02 (30D2)
D4	Diode	ERC01-02 (30D2)
D5	Diode	SIB01-02 (1S1886)
D6	Diode	SIB01-02 (1S1886)
D7	Diode	1S2473
D8	Diode	1S2473
D9	Varistor	STV-3H-Y
D10	Varistor	STV-3H-Y
D11	Zener diode	WZ-240
D12	Zener diode	WZ-240
D13	Diode	1S2473
D14	Zener diode	EQA-01-35R
D15	Thyristor	SM2B41
D16	Diode	1S2473

List of Changed Parts for Factory Modification

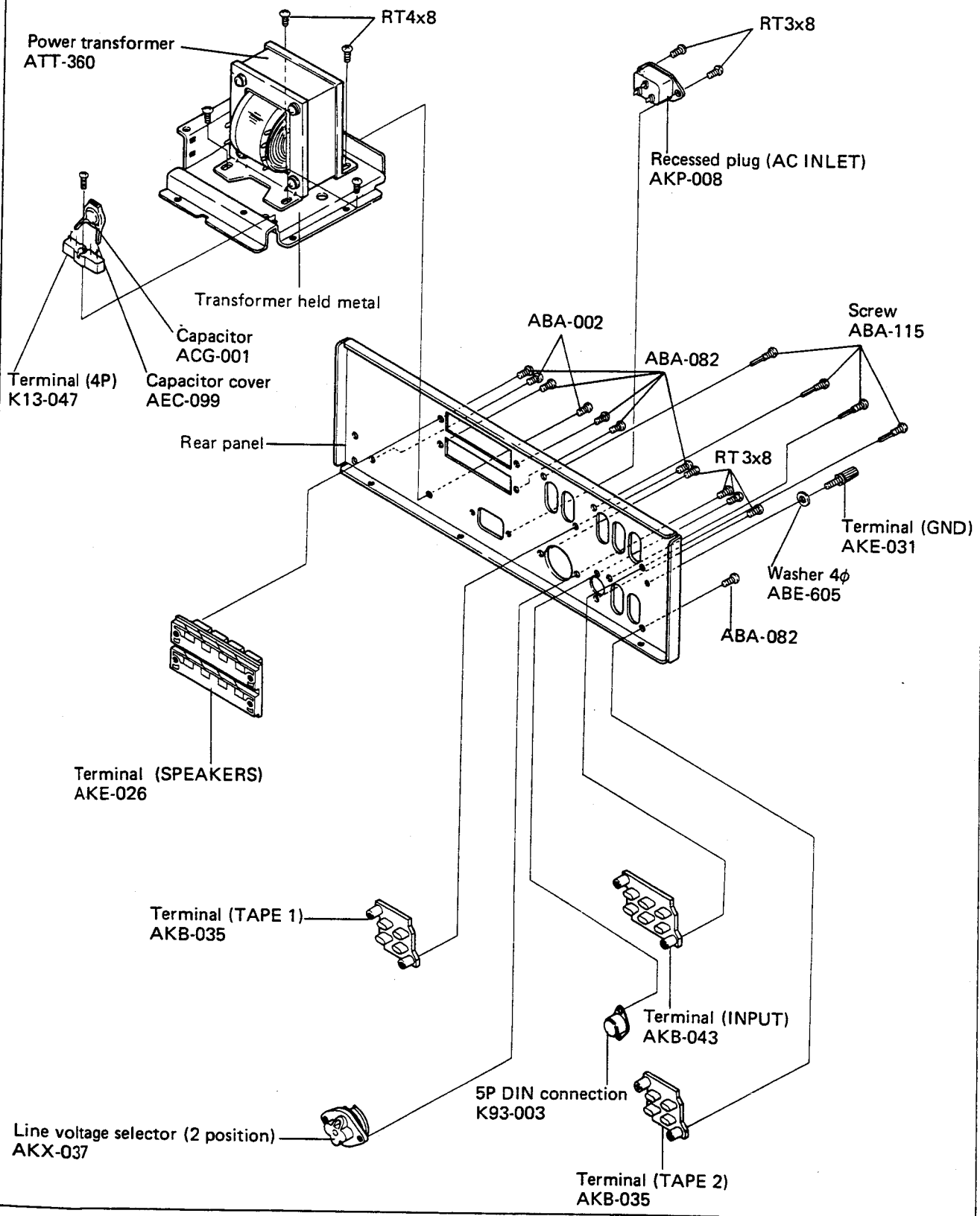
Symbol	Description	Part No.

6. EXPLODED VIEWS

6.1 REAR PANEL OF SA-6500II/HG

NOTE:

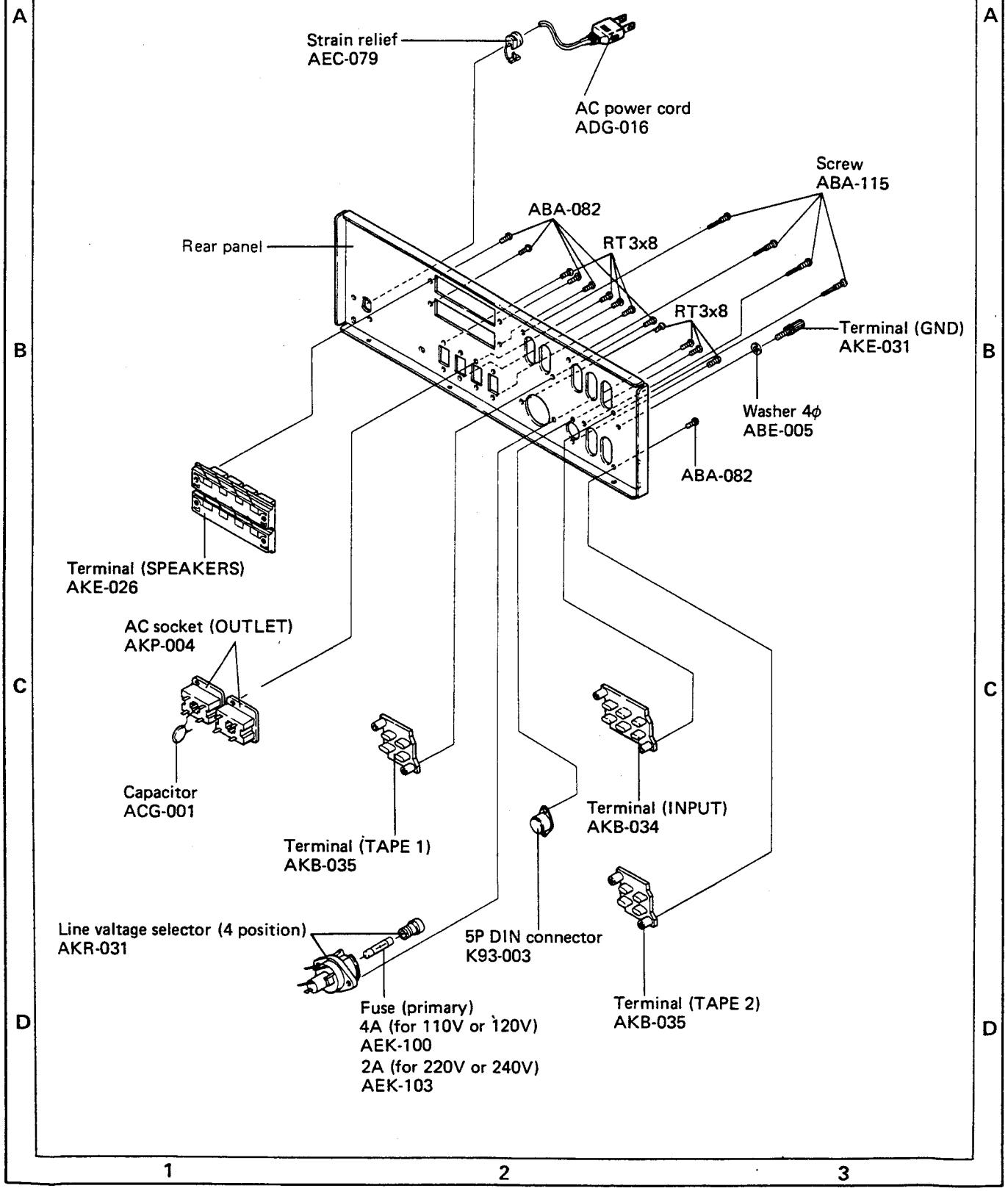
- *The exploded view for the HG type is the same as KU type except the Rear Panel section.*
- *Parts indicated in red type cannot be supplied.*
- *All screws are Phillips (cross recess) type.*



6.2 REAR PANEL VIEW OF SA-6500II/S

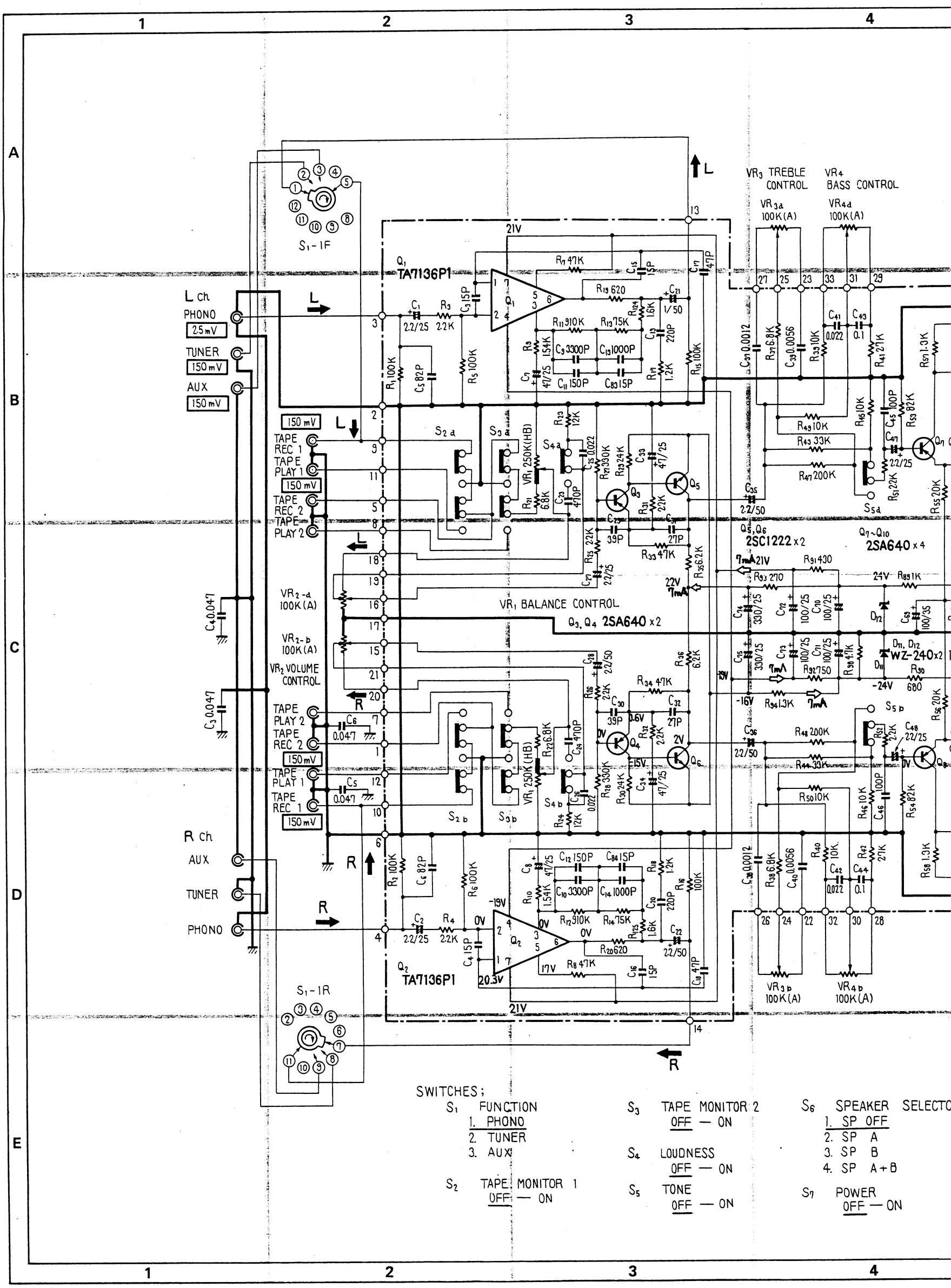
NOTE:

- *The exploded view for the S type is the same as KU type except the Rear Panel section.*
- *Parts indicated in red type cannot be supplied.*
- *All screws are Phillips (cross recess) type.*



STEREO AMPLIFIER

SA-6500II KC



SWITCHES;

S1 FUNCTION
1. PHONO
2. TUNER
3. AUX

S2 TAPE MONITOR 1
OFF — ON

S3 TAPE MONITOR 2
OFF — ON

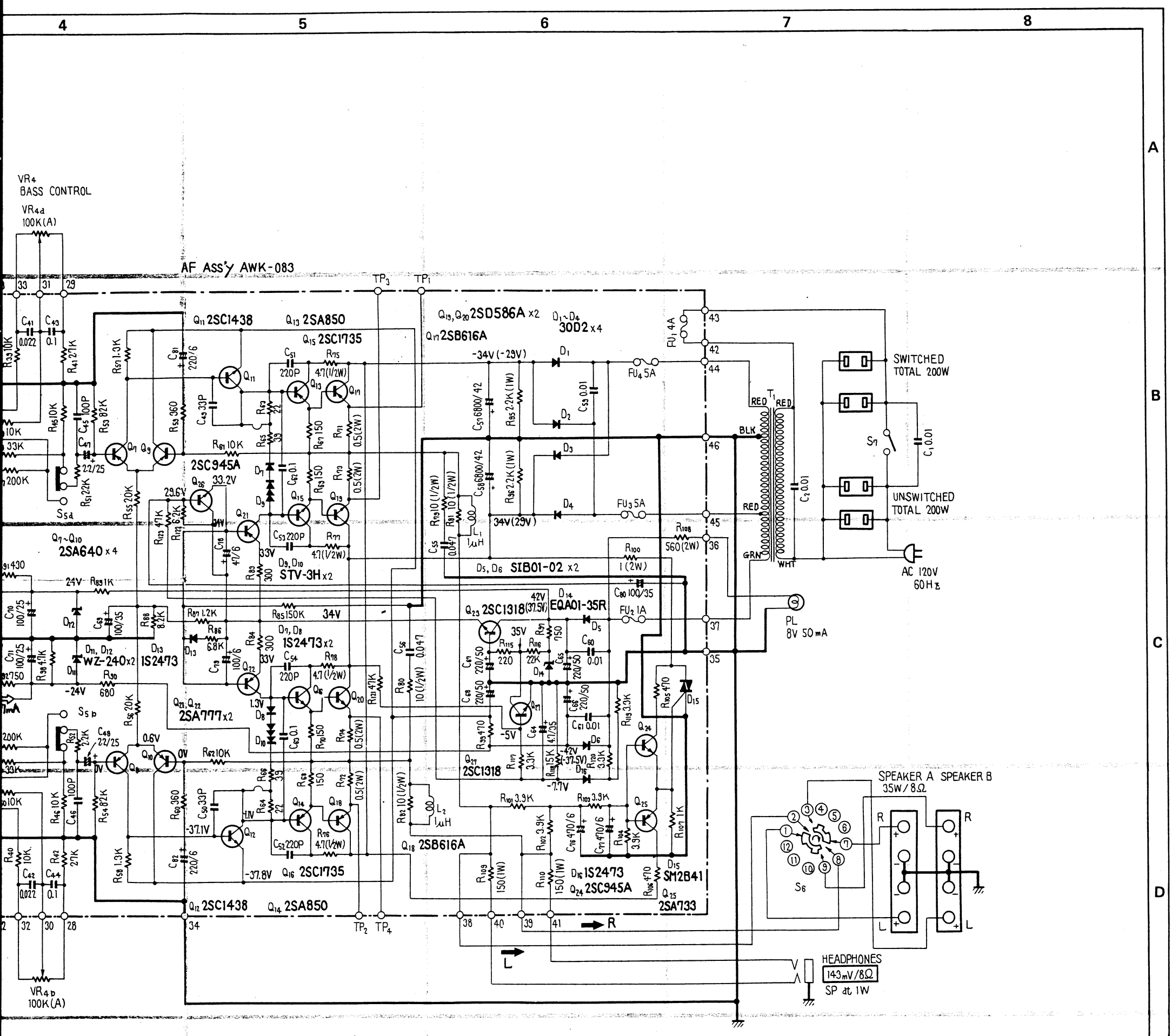
S4 LOUDNESS
OFF — ON

S5 TONE
OFF — ON

S6 SPEAKER SELECTO
1. SP OFF
2. SP A
3. SP B
4. SP A+B

S7 POWER
OFF — ON

PIONEER®



SPEAKER SELECTOR
1. SP OFF
2. SP A
3. SP B
4. SP A+B

POWER
OFF — ON

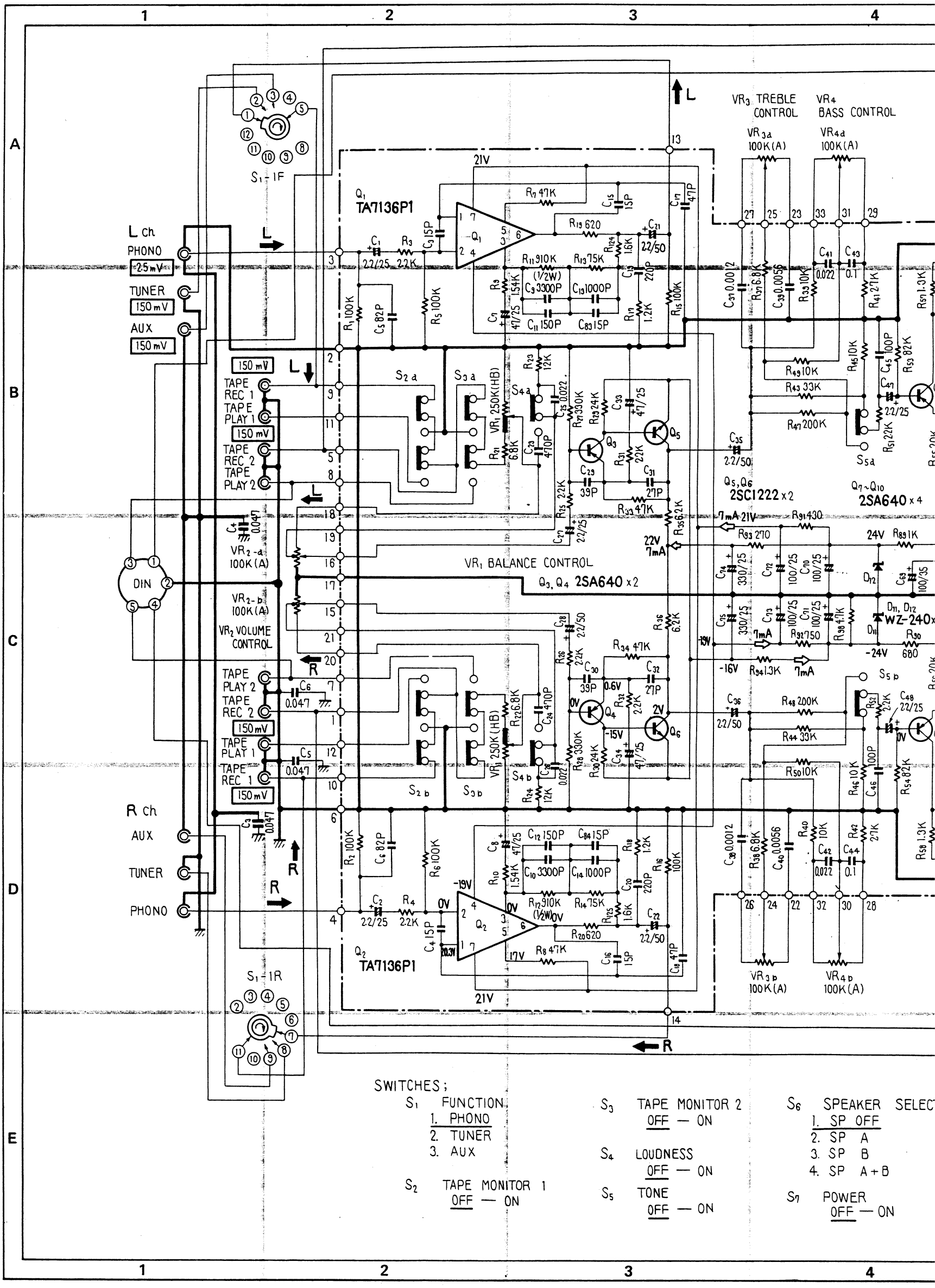
NOTES;
RESISTORS;
IN OHM, 1/4W, ±5% TOLERANCE UNLESS OTHERWISE NOTED K: kΩ M: MΩ

CAPACITORS;
IN μF UNLESS OTHERWISE NOTED P: pF

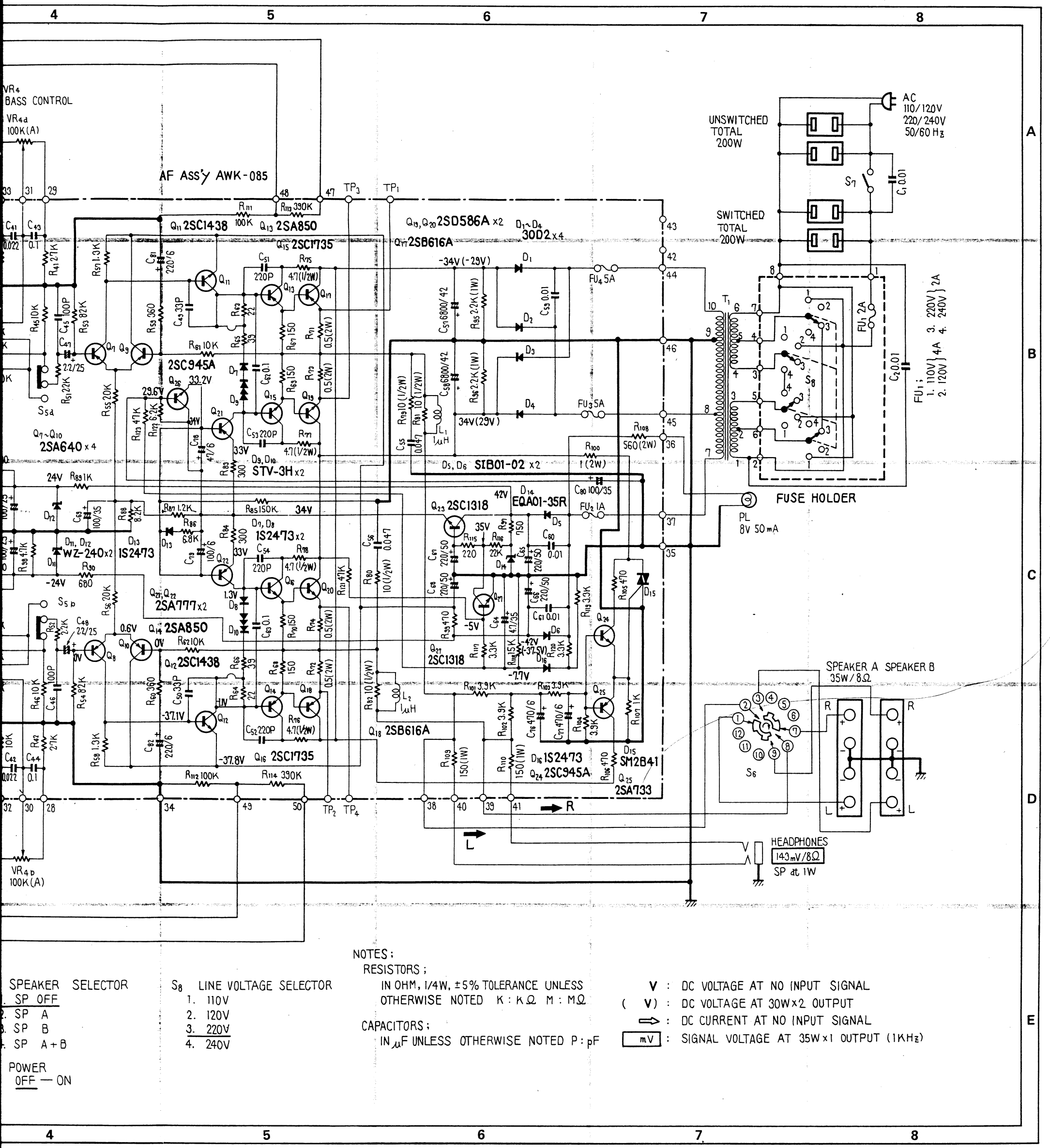
V : DC VOLTAGE AT NO INPUT SIGNAL
(V) : DC VOLTAGE AT 25W x2 OUTPUT
⇨ : DC CURRENT AT NO INPUT SIGNAL
[mV] : SIGNAL VOLTAGE AT 35W x1 OUTPUT (1KHz)

STEREO AMPLIFIER

SA-6500II S



PIONEER®



SPEAKER SELECTOR
1. SP OFF
2. SP A
3. SP B
4. SP A+B

POWER
OFF — ON

S_8 LINE VOLTAGE SELECTOR
1. 110V
2. 120V
3. 220V
4. 240V

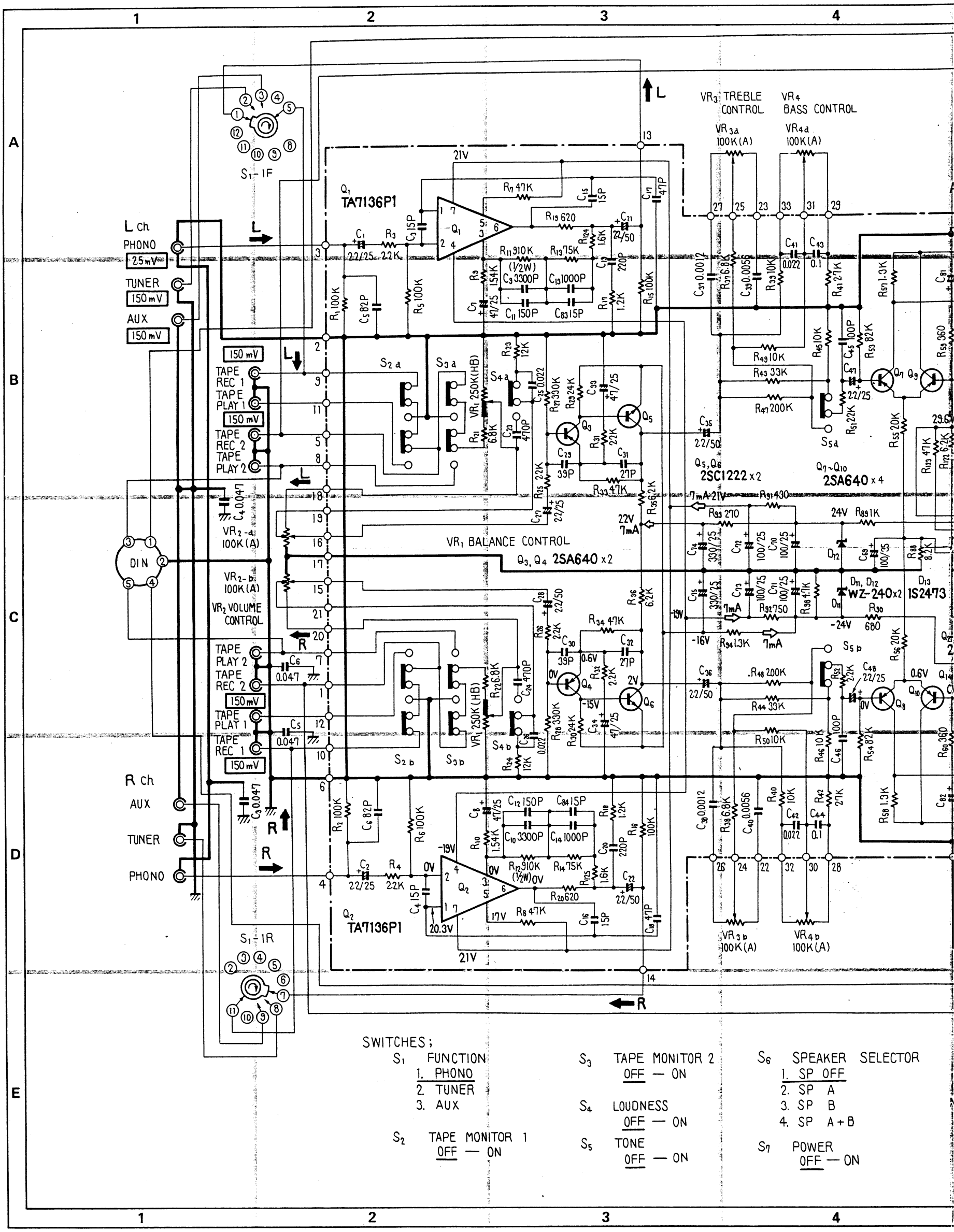
NOTES;
RESISTORS;
IN OHM, 1/4W, ±5% TOLERANCE UNLESS OTHERWISE NOTED K : KΩ M : MΩ

CAPACITORS;
IN μF UNLESS OTHERWISE NOTED P : pF

V : DC VOLTAGE AT NO INPUT SIGNAL
(V) : DC VOLTAGE AT 30W×2 OUTPUT
⇨ : DC CURRENT AT NO INPUT SIGNAL
[mV] : SIGNAL VOLTAGE AT 35W×1 OUTPUT (1KHz)

STEREO AMPLIFIER

SA-6500II HG



SWITCHES;

S_1 FUNCTION
1. PHONO
2. TUNER
3. AUX

S_2 TAPE MONITOR 1
OFF — ON

S_3 TAPE MONITOR 2
OFF — ON

S_4 LOUDNESS
OFF — ON

S_5 TONE
OFF — ON

S_6 SPEAKER SELECTOR
1. SP OFF
2. SP A
3. SP B
4. SP A+B

S_7 POWER
OFF — ON

PIONEER®

AF ASS'Y AWK-084

CONTROL

Q11 2SC1438 Q13 2SA850 Q15 2SC1735

Q19, Q20 2SD586A x2 Q17 2SB616A

D1~D4 30D2 x4

Q7~Q10 2SA640 x4

2SC945A

D9, D10 STV-3H x2

D5, D6 SIB01-02 x2

Q23 2SC1318 D14 EQA01-35R

D11, D12 WZ-240 x2

D13 1S2473

D7, D8 1S2473 x2

Q21, Q22 2SA777 x2

Q12 2SC1438

Q18 2SB616A

D16 1S2473 Q24 2SC945A

Q25 2SA733

Q27 2SC1318

D15 SM2841

FU1 T. 1.6A

FU4 T. 4A

FU3 T. 4A

FU2 T. 1A

T1

S8 240V 220V

S7a S7b

220/240V 50/60Hz

GRN

PL 8V 50mA

SPEAKER A SPEAKER B 35W/8Ω

S6

HEADPHONES 143mV/8Ω SP at 1W

S5a S5b

EAKER SELECTOR
P OFF
P A
P B
P A+B

WER
FF — ON

S8 LINE VOLTAGE SELECTOR
220V — 240V

NOTES ;
RESISTORS;
IN OHM, 1/4W, ±5% TOLERANCE UNLESS OTHERWISE NOTED K : kΩ M : MΩ

CAPACITORS;
IN μF UNLESS OTHERWISE NOTED P : pF

V : DC VOLTAGE AT NO INPUT SIGNAL
(V) : DC VOLTAGE AT 30W x2 OUTPUT
⇨ : DC CURRENT AT NO INPUT SIGNAL
mV : SIGNAL VOLTAGE AT 35W x1 OUTPUT (1KHz)